YAMAHA

MODUS F11

MODUS F01

Data List
Daten-Liste
Liste des données
Lista de datos

F11

F01

EN
DE
FR
ES

(F11) XG Voice List / XG Voice-Liste / Liste des voix XG / Lista de sonidos XG

GM&XG

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Piano	GrandPiano	0	0	1	Regular
	GrndPianoKSP	0	1	1	Regular
	MellowGrPno	0	18	1	Regular
	PianoStrings	0	40	1	Regular
	Dream	0	41	1	Regular
	BrightPiano	0	0	2	Regular
	BritePnoKSP	0	1	2	Regular
	ElecGrandPno	0	0	3	Regular
	ElecGrPnoKSP	0	1	3	Regular
	DetunedCP80	0	32	3	Regular
	LayeredCP1	0	40	3	Regular
	LayeredCP2	0	41	3	Regular
	Honkytonk	0	0	4	Regular
	HonkytonkKSP	0	1	4	Regular
	El.Piano1	0	0	5	Regular
	El.Piano1KSP	0	1	5	Regular
	MellowEP1	0	18	5	Regular
	ChorusEP1	0	32	5	Regular
	HardEl.Piano	0	40	5	Regular
	VXfadeEl.P1	0	45	5	Regular
	60sEl.Piano1	0	64	5	Regular
	El.Piano2	0	0	6	Regular
	El.Piano2KSP	0	1	6	Regular
	ChorusEP2	0	32	6	Regular
	DXEPHard	0	33	6	Regular
	DXLegend	0	34	6	Regular
	DXPhaseEP	0	40	6	Regular
	DX+AnalogEP	0	41	6	Regular
	DXKotoEP	0	42	6	Regular
	VXfadeEl.P2	0	45	6	Regular
	Harpsichord	0	0	7	Regular
	Harpsi.KSP	0	1	7	Regular
	Harpsichord2	0	25	7	Regular
	Harpsichord3	0	35	7	Regular
	Clavi.	0	0	8	Regular
	Clavi.KSP	0	1	8	Regular
	Clavi.Wah	0	27	8	Regular
	PulseClavi.	0	64	8	Regular
	PierceClavi.	0	65	8	Regular
ChromaticPerc	Celesta	0	0	9	Regular
	Glockenspiel	0	0	10	Regular
	MusicBox	0	0	11	Regular
	Orgel	0	64	11	Regular
	Vibraphone	0	0	12	Regular
	VibesKSP	0	1	12	Regular
	HardVibes	0	45	12	Regular
	Marimba	0	0	13	Regular
	MarimbaKSP	0	1	13	Regular
	SineMarimba	0	64	13	Regular
	Balimba	0	97	13	Regular
	LogDrums	0	98	13	Regular
	Xylophone	0	0	14	Regular
	TubularBells	0	0	15	Regular
	ChurchBells	0	96	15	Regular
	Carillon	0	97	15	Regular
	Dulcimer	0	0	16	Regular
	Dulcimer2	0	35	16	Regular
	Cimbalom	0	96	16	Regular
	Santur	0	97	16	Regular
Organ	DrawbarOrgan	0	0	17	Regular
	DetDrawOrgan	0	32	17	Regular
	60sDrawOrg1	0	33	17	Regular
	60sDrawOrg2	0	34	17	Regular
	70sDrawOrg1	0	35	17	Regular
	DrawbarOrg2	0	36	17	Regular
	60sDrawOrg3	0	37	17	Regular
	EvenBarOrg	0	38	17	Regular
	16+2'2_3Org	0	40	17	Regular
	OrganBass	0	64	17	Regular
	70sDrawOrg2	0	65	17	Regular
	CheezyOrgan	0	66	17	Regular
	DrawbarOrg3	0	67	17	Regular
	Perc.Organ	0	0	18	Regular
	70sPercOrg1	0	24	18	Regular
	DetPercOrgan	0	32	18	Regular
	LightOrgan	0	33	18	Regular
	Perc.Organ2	0	37	18	Regular
	RockOrgan	0	0	19	Regular
	RotaryOrgan	0	64	19	Regular
	SlowRotary	0	65	19	Regular
	FastRotary	0	66	19	Regular
	ChurchOrgan	0	0	20	Regular
	ChurchOrgan3	0	32	20	Regular

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Organ	ChurchOrgan2	0	35	20	Regular
	NotreDame	0	40	20	Regular
	OrganFlute	0	64	20	Regular
	Trem.OrganFl	0	65	20	Regular
	ReedOrgan	0	0	21	Regular
	PuffOrgan	0	40	21	Regular
	Accordion	0	0	22	Regular
	AccordIt	0	32	22	Regular
	Harmonica	0	0	23	Regular
	Harmonica2	0	32	23	Regular
	TangoAccord	0	0	24	Regular
	TangoAccord2	0	64	24	Regular
Guitar	NylonGuitar	0	0	25	Regular
	NylonGuitar2	0	16	25	Regular
	NylonGuitar3	0	25	25	Regular
	VelGtrHarmo	0	43	25	Regular
	Ukulele	0	96	25	Regular
	SteelGuitar	0	0	26	Regular
	SteelGuitar2	0	16	26	Regular
	12StrGuitar	0	35	26	Regular
	Nylon&Steel	0	40	26	Regular
	Steel&Body	0	41	26	Regular
	Mandolin	0	96	26	Regular
	JazzGuitar	0	0	27	Regular
	MellowGuitar	0	18	27	Regular
	JazzAmp	0	32	27	Regular
	CleanGuitar	0	0	28	Regular
	ChorusGuitar	0	32	28	Regular
	MutedGuitar	0	0	29	Regular
	FunkGuitar1	0	40	29	Regular
	MuteSteelGtr	0	41	29	Regular
	FunkGuitar2	0	43	29	Regular
	JazzMan	0	45	29	Regular
	Overdriven	0	0	30	Regular
	GuitarPinch	0	43	30	Regular
	Distortion	0	0	31	Regular
	FeedbackGtr	0	40	31	Regular
	FeedbackGtr2	0	41	31	Regular
	GtrHarmonics	0	0	32	Regular
	GtrFeedback	0	65	32	Regular
	GtrHarmonic2	0	66	32	Regular
Bass	AcousticBass	0	0	33	Regular
	JazzRhythm	0	40	33	Regular
	VXUprghtBass	0	45	33	Regular
	FingerBass	0	0	34	Regular
	FingerDark	0	18	34	Regular
	FlangeBass	0	27	34	Regular
	Bass&DistEG	0	40	34	Regular
	FingerSlap	0	43	34	Regular
	FingerBass2	0	45	34	Regular
	Mod.Bass	0	65	34	Regular
	PickBass	0	0	35	Regular
	MutePickBass	0	28	35	Regular
	FretlessBass	0	0	36	Regular
	Fretless2	0	32	36	Regular
	Fretless3	0	33	36	Regular
	Fretless4	0	34	36	Regular
	Syn.Fretless	0	96	36	Regular
	SmthFretless	0	97	36	Regular
	SlapBass1	0	0	37	Regular
	ResonantSlap	0	27	37	Regular
	PunchThumb	0	32	37	Regular
	SlapBass2	0	0	38	Regular
	Velo.Sw.Slap	0	43	38	Regular
	SynthBass1	0	0	39	Regular
	SynBass1Dark	0	18	39	Regular
	FastResoBass	0	20	39	Regular
	AcidBass	0	24	39	Regular
	ClaviBass	0	35	39	Regular
	TechnoBass	0	40	39	Regular
	Orbiter	0	64	39	Regular
	SquareBass	0	65	39	Regular
	RubberBass	0	66	39	Regular
	Hammer	0	96	39	Regular
	SynthBass2	0	0	40	Regular
	MellowSyBass	0	6	40	Regular
	SequenceBass	0	12	40	Regular
	ClickSynBass	0	18	40	Regular
	SynBass2Dark	0	19	40	Regular
	SmoothSyBass	0	32	40	Regular
	ModulrSyBass	0	40	40	Regular
	DXBass	0	41	40	Regular
	XWireBass	0	64	40	Regular

GM&XG

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Strings	Violin	0	0	41	Regular
	SlwAtkViolin	0	8	41	Regular
	Viola	0	0	42	Regular
	Cello	0	0	43	Regular
	Contrabass	0	0	44	Regular
	Trem.Strings	0	0	45	Regular
	SlwAtTremStr	0	8	45	Regular
	SuspenseStr	0	40	45	Regular
	PizzicatoStr	0	0	46	Regular
	Orch.Harp	0	0	47	Regular
	YangChin	0	40	47	Regular
	Timpani	0	0	48	Regular
Ensemble	Strings1	0	0	49	Regular
	StereoStrngs	0	3	49	Regular
	SlwAtkStrngs	0	8	49	Regular
	ArcoStrings	0	24	49	Regular
	60'sStrings	0	35	49	Regular
	Orchestra	0	40	49	Regular
	Orchestra2	0	41	49	Regular
	TremOrchstra	0	42	49	Regular
	Velo.Strings	0	45	49	Regular
	Strings2	0	0	50	Regular
	S.SlowStrngs	0	3	50	Regular
	LegatoStrngs	0	8	50	Regular
	WarmStrings	0	40	50	Regular
	Kingdom	0	41	50	Regular
	70'sStrings	0	64	50	Regular
	Strings3	0	65	50	Regular
	SynStrings1	0	0	51	Regular
	ResoStrings	0	27	51	Regular
	SynStrings4	0	64	51	Regular
	SynStrings5	0	65	51	Regular
	SynStrings2	0	0	52	Regular
	ChoirAahs	0	0	53	Regular
	StereoChoir	0	3	53	Regular
	ChoirAahs2	0	16	53	Regular
	MellowChoir	0	32	53	Regular
	ChoirStrings	0	40	53	Regular
	VoiceOohs	0	0	54	Regular
	SynthVoice	0	0	55	Regular
	SynthVoice2	0	40	55	Regular
	Choral	0	41	55	Regular
	AnalogVoice	0	64	55	Regular
	OrchestraHit	0	0	56	Regular
	OrchestrHit2	0	35	56	Regular
	Impact	0	64	56	Regular
Brass	Trumpet	0	0	57	Regular
	Trumpet2	0	16	57	Regular
	BriteTrumpet	0	17	57	Regular
	WarmTrumpet	0	32	57	Regular
	Trombone	0	0	58	Regular
	Trombone2	0	18	58	Regular
	Tuba	0	0	59	Regular
	Tuba2	0	16	59	Regular
	MutedTrumpet	0	0	60	Regular
	FrenchHorn	0	0	61	Regular
	Fr.HornSolo	0	6	61	Regular
	FrenchHorn2	0	32	61	Regular
	HornOrchestr	0	37	61	Regular
	BrassSection	0	0	62	Regular
	Tp&TbSection	0	35	62	Regular
	BrassSect2	0	40	62	Regular
	HighBrass	0	41	62	Regular
	MellowBrass	0	42	62	Regular
	SynthBrass1	0	0	63	Regular
	QuackBrass	0	12	63	Regular
	ResoSynBrass	0	20	63	Regular
	PolyBrass	0	24	63	Regular
	SynthBrass3	0	27	63	Regular
	JumpBrass	0	32	63	Regular
	AnaVelBrass1	0	45	63	Regular
	AnalogBrass1	0	64	63	Regular
	SynthBrass2	0	0	64	Regular
	SoftBrass	0	18	64	Regular
	SynthBrass4	0	40	64	Regular
	ChoirBrass	0	41	64	Regular
	AnaVelBrass2	0	45	64	Regular
	AnalogBrass2	0	64	64	Regular
Reed	SopranoSax	0	0	65	Regular
	AltoSax	0	0	66	Regular
	SaxSection	0	40	66	Regular
	HyperAltoSax	0	43	66	Regular
	TenorSax	0	0	67	Regular

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Reed	BreathyTenor	0	40	67	Regular
	SoftTenorSax	0	41	67	Regular
	TenorSax2	0	64	67	Regular
	BaritoneSax	0	0	68	Regular
	Oboe	0	0	69	Regular
	EnglishHorn	0	0	70	Regular
	Bassoon	0	0	71	Regular
	Clarinet	0	0	72	Regular
Pipe	Piccolo	0	0	73	Regular
	Flute	0	0	74	Regular
	Recorder	0	0	75	Regular
	PanFlute	0	0	76	Regular
	BlownBottle	0	0	77	Regular
	Shakuhachi	0	0	78	Regular
	Whistle	0	0	79	Regular
	Ocarina	0	0	80	Regular
Synth.Lead	SquareLead	0	0	81	Regular
	SquareLead2	0	6	81	Regular
	LMSquare	0	8	81	Regular
	Hollow	0	18	81	Regular
	Shroud	0	19	81	Regular
	Mellow	0	64	81	Regular
	SoloSine	0	65	81	Regular
	SineLead	0	66	81	Regular
	SawtoothLead	0	0	82	Regular
	SawtoothLd2	0	6	82	Regular
	ThickSaw	0	8	82	Regular
	DynamicSaw	0	18	82	Regular
	DigitalSaw	0	19	82	Regular
	BigLead	0	20	82	Regular
	HeavySynth	0	24	82	Regular
	WaspySynth	0	25	82	Regular
	PulseSaw	0	40	82	Regular
	Dr.Lead	0	41	82	Regular
	VelocityLead	0	45	82	Regular
	Seq.Analog	0	96	82	Regular
	CalliopeLead	0	0	83	Regular
	PureLead	0	65	83	Regular
	ChiffLead	0	0	84	Regular
	Rubby	0	64	84	Regular
	CharangLead	0	0	85	Regular
	DistortedLd	0	64	85	Regular
	WireLead	0	65	85	Regular
	VoiceLead	0	0	86	Regular
	SynthAahs	0	24	86	Regular
	VoxLead	0	64	86	Regular
	FifthsLead	0	0	87	Regular
	BigFive	0	35	87	Regular
	Bass&Lead	0	0	88	Regular
	Big&Low	0	16	88	Regular
	Fat&Perky	0	64	88	Regular
	SoftWhirl	0	65	88	Regular
Synth.Pad	NewAgePad	0	0	89	Regular
	Fantasy	0	64	89	Regular
	WarmPad	0	0	90	Regular
	ThickPad	0	16	90	Regular
	SoftPad	0	17	90	Regular
	SinePad	0	18	90	Regular
	HornPad	0	64	90	Regular
	RotaryStrngs	0	65	90	Regular
	PolySynthPad	0	0	91	Regular
	PolyPad80	0	64	91	Regular
	ClickPad	0	65	91	Regular
	AnalogPad	0	66	91	Regular
	SquarePad	0	67	91	Regular
	ChoirPad	0	0	92	Regular
	Heaven	0	64	92	Regular
	Itopia	0	66	92	Regular
	CCPad	0	67	92	Regular
	BowedPad	0	0	93	Regular
	Glacier	0	64	93	Regular
	GlassPad	0	65	93	Regular
	MetallicPad	0	0	94	Regular
	TinePad	0	64	94	Regular
	PanPad	0	65	94	Regular
	HaloPad	0	0	95	Regular
	SweepPad	0	0	96	Regular
	Shwimmer	0	20	96	Regular
	Converge	0	27	96	Regular
	PolarPad	0	64	96	Regular
	Celestial	0	66	96	Regular

GM&XG

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Synth.Effect	Rain	0	0	97	Regular
	ClaviPad	0	45	97	Regular
	HarmoRain	0	64	97	Regular
	AfricanWind	0	65	97	Regular
	Carib	0	66	97	Regular
	SoundTrack	0	0	98	Regular
	Prologue	0	27	98	Regular
	Ancestral	0	64	98	Regular
	Crystal	0	0	99	Regular
	SynthDr.Comp	0	12	99	Regular
	Popcorn	0	14	99	Regular
	TinyBells	0	18	99	Regular
	RoundGlocken	0	35	99	Regular
	GlockenChime	0	40	99	Regular
	ClearBells	0	41	99	Regular
	ChorusBells	0	42	99	Regular
	SynthMallet	0	64	99	Regular
	SoftCrystal	0	65	99	Regular
	LoudGlocken	0	66	99	Regular
	ChristmasBel	0	67	99	Regular
	VibeBells	0	68	99	Regular
	DigitalBells	0	69	99	Regular
	AirBells	0	70	99	Regular
	BellHarp	0	71	99	Regular
	Gamelimba	0	72	99	Regular
	Atmosphere	0	0	100	Regular
	WarmAtmos.	0	18	100	Regular
	HollwRelease	0	19	100	Regular
	NylonElPiano	0	40	100	Regular
	NylonHarp	0	64	100	Regular
	HarpVox	0	65	100	Regular
	Atmos.Pad	0	66	100	Regular
	Planet	0	67	100	Regular
	Brightness	0	0	101	Regular
	FantasyBells	0	64	101	Regular
	Smokey	0	96	101	Regular
	Goblins	0	0	102	Regular
	GoblinsSynth	0	64	102	Regular
	Creeper	0	65	102	Regular
	RingPad	0	66	102	Regular
	Ritual	0	67	102	Regular
	ToHeaven	0	68	102	Regular
	Night	0	70	102	Regular
	Glisten	0	71	102	Regular
	BellChoir	0	96	102	Regular
	Echoes	0	0	103	Regular
	Echoes2	0	8	103	Regular
	EchoPan	0	14	103	Regular
	EchoBells	0	64	103	Regular
	BigPan	0	65	103	Regular
	SynthPiano	0	66	103	Regular
	Creation	0	67	103	Regular
	StarDust	0	68	103	Regular
	Reso&Panning	0	69	103	Regular
	Sci-Fi	0	0	104	Regular
	Starz	0	64	104	Regular
Ethnic	Sitar	0	0	105	Regular
	DetunedSitar	0	32	105	Regular
	Sitar2	0	35	105	Regular
	Tambra	0	96	105	Regular
	Tamboura	0	97	105	Regular
	Banjo	0	0	106	Regular
	MutedBanjo	0	28	106	Regular
	Rabab	0	96	106	Regular
	Gopichant	0	97	106	Regular
	Oud	0	98	106	Regular
	Shamisen	0	0	107	Regular
	Koto	0	0	108	Regular
	Taisho-kin	0	96	108	Regular
	Kanoon	0	97	108	Regular
	Kalimba	0	0	109	Regular
	Bagpipe	0	0	110	Regular
	Fiddle	0	0	111	Regular
	Shanai	0	0	112	Regular
	Shanai2	0	64	112	Regular
	Pungi	0	96	112	Regular
	Hichiriki	0	97	112	Regular
Percussive	TinkleBell	0	0	113	Regular
	Bonang	0	96	113	Regular
	Altair	0	97	113	Regular
	GamelanGongs	0	98	113	Regular
	StereoGamlan	0	99	113	Regular
	RamaCymbal	0	100	113	Regular

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Percussive	AsianBells	0	101	113	Regular
	Agogo	0	0	114	Regular
	SteelDrums	0	0	115	Regular
	GlassPerc.	0	97	115	Regular
	ThaiBells	0	98	115	Regular
	Woodblock	0	0	116	Regular
	Castanets	0	96	116	Regular
	TaikoDrum	0	0	117	Regular
	GranCassa	0	96	117	Regular
	MelodicTom	0	0	118	Regular
	MelodicTom2	0	64	118	Regular
	RealTom	0	65	118	Regular
	RockTom	0	66	118	Regular
	SynthDrum	0	0	119	Regular
	AnalogTom	0	64	119	Regular
	ElectroPerc.	0	65	119	Regular
	Rev.Cymbal	0	0	120	Regular
Sound Effect	GtrFretNoise	0	0	121	Regular
	BreathNoise	0	0	122	Regular
	Seashore	0	0	123	Regular
	BirdTweet	0	0	124	Regular
	TelephonRing	0	0	125	Regular
	Helicopter	0	0	126	Regular
	Applause	0	0	127	Regular
	Gunshot	0	0	128	Regular
	CuttingNoise	64	0	1	Regular
	CuttingNoiz2	64	0	2	Regular
	StringSlap	64	0	4	Regular
	Fl.KeyClick	64	0	17	Regular
	Shower	64	0	33	Regular
	Thunder	64	0	34	Regular
	Wind	64	0	35	Regular
	Stream	64	0	36	Regular
	Bubble	64	0	37	Regular
	Feed	64	0	38	Regular
	Dog	64	0	49	Regular
	Horse	64	0	50	Regular
	BirdTweet2	64	0	51	Regular
	Ghost	64	0	55	Regular
	Maou	64	0	56	Regular
	PhoneCall	64	0	65	Regular
	DoorSqueak	64	0	66	Regular
	DoorSlam	64	0	67	Regular
	ScratchCut	64	0	68	Regular
	ScratchSplit	64	0	69	Regular
	WindChime	64	0	70	Regular
	TelphonRing2	64	0	71	Regular
	CarEngineIgn	64	0	81	Regular
	CarTiresSqel	64	0	82	Regular
	CarPassing	64	0	83	Regular
	CarCrash	64	0	84	Regular
	Siren	64	0	85	Regular
	Train	64	0	86	Regular
	JetPlane	64	0	87	Regular
	Starship	64	0	88	Regular
	Burst	64	0	89	Regular
	RollrCoaster	64	0	90	Regular
	Submarine	64	0	91	Regular
	Laugh	64	0	97	Regular
	Scream	64	0	98	Regular
	Punch	64	0	99	Regular
	Heartbeat	64	0	100	Regular
	FootSteps	64	0	101	Regular
	MachineGun	64	0	113	Regular
	LaserGun	64	0	114	Regular
	Explosion	64	0	115	Regular
	Firework	64	0	116	Regular

GM2

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Piano	GrandPiano	121	0	1	Regular
	GrandPianoW	121	1	1	Regular
	GrandPianoD	121	2	1	Regular
	BrightPiano	121	0	2	Regular
	BrightPianoW	121	1	2	Regular
	ElecGrandPno	121	0	3	Regular
	ElecGrandPW	121	1	3	Regular
	Honkytonk	121	0	4	Regular
	HonkytonkW	121	1	4	Regular
	El.Piano1	121	0	5	Regular
	DetunedEP1	121	1	5	Regular
	EP1VeloMix	121	2	5	Regular
	60'sEl.Piano	121	3	5	Regular
	El.Piano2	121	0	6	Regular
	DetunedEP2	121	1	6	Regular
	EP2VeloMix	121	2	6	Regular
	EPLegend	121	3	6	Regular
	EPPhase	121	4	6	Regular
	Harpsichord	121	0	7	Regular
	Harpsi.OctMx	121	1	7	Regular
	HarpsichordW	121	2	7	Regular
	Harpsi.KOff	121	3	7	Regular
	Clavi.	121	0	8	Regular
	PulseClavi.	121	1	8	Regular
ChromaticPerc	Celesta	121	0	9	Regular
	Glockenspiel	121	0	10	Regular
	MusicBox	121	0	11	Regular
	Vibraphone	121	0	12	Regular
	VibraphoneW	121	1	12	Regular
	Marimba	121	0	13	Regular
	MarimbaW	121	1	13	Regular
	Xylophone	121	0	14	Regular
	TubularBells	121	0	15	Regular
	ChurchBells	121	1	15	Regular
	Carillon	121	2	15	Regular
	Dulcimer	121	0	16	Regular
Organ	DrawbarOrgan	121	0	17	Regular
	DetDrawOrgan	121	1	17	Regular
	It60'sOrgan	121	2	17	Regular
	DrawbarOrg2	121	3	17	Regular
	Perc.Organ	121	0	18	Regular
	DetPercOrgan	121	1	18	Regular
	Perc.Organ2	121	2	18	Regular
	RockOrgan	121	0	19	Regular
	ChurchOrgan	121	0	20	Regular
	ChrchOrgOctM	121	1	20	Regular
	DetChurchOrg	121	2	20	Regular
	ReedOrgan	121	0	21	Regular
	PuffOrgan	121	1	21	Regular
	Accordion	121	0	22	Regular
	Accordion2	121	1	22	Regular
	Harmonica	121	0	23	Regular
	TangoAccord	121	0	24	Regular
Guitar	NylonGuitar	121	0	25	Regular
	Ukulele	121	1	25	Regular
	NylonGtrKOff	121	2	25	Regular
	NylonGuitar2	121	3	25	Regular
	SteelGuitar	121	0	26	Regular
	12StrGuitar	121	1	26	Regular
	Mandolin	121	2	26	Regular
	Steel&Body	121	3	26	Regular
	JazzGuitar	121	0	27	Regular
	PedlSteelGtr	121	1	27	Regular
	CleanGuitar	121	0	28	Regular
	DetCleanGtr	121	1	28	Regular
	MidToneGtr	121	2	28	Regular
	MutedGuitar	121	0	29	Regular
	FunkGuitar	121	1	29	Regular
	MutedV-SwGtr	121	2	29	Regular
	JazzMan	121	3	29	Regular
	Overdriven	121	0	30	Regular
	GuitarPinch	121	1	30	Regular
	Distortion	121	0	31	Regular
	FeedbackGtr	121	1	31	Regular
	DstRhythmGtr	121	2	31	Regular
	GtrHarmonics	121	0	32	Regular
	GtrFeedback	121	1	32	Regular
Bass	AcousticBass	121	0	33	Regular
	FingerBass	121	0	34	Regular
	FingerSlap	121	1	34	Regular
	PickBass	121	0	35	Regular
	FretlessBass	121	0	36	Regular
	SlapBass1	121	0	37	Regular
Bass	SlapBass2	121	0	38	Regular
	SynthBass1	121	0	39	Regular
	WarmSyBass	121	1	39	Regular
	ResoSynhBass	121	2	39	Regular
	ClaviBass	121	3	39	Regular
	Hammer	121	4	39	Regular
	SynthBass2	121	0	40	Regular
	AttackBass	121	1	40	Regular
	RubberBass	121	2	40	Regular
	AttackPulse	121	3	40	Regular
Strings	Violin	121	0	41	Regular
	SlwAtkViolin	121	1	41	Regular
	Viola	121	0	42	Regular
	Cello	121	0	43	Regular
	Contrabass	121	0	44	Regular
	Trem.Strings	121	0	45	Regular
	PizzicatoStr	121	0	46	Regular
	Orch.Harp	121	0	47	Regular
	YangChin	121	1	47	Regular
	Timpani	121	0	48	Regular
Ensemble	Strings1	121	0	49	Regular
	StringsBrass	121	1	49	Regular
	60'sStrings	121	2	49	Regular
	Strings2	121	0	50	Regular
	SynStrings1	121	0	51	Regular
	SynStrings3	121	1	51	Regular
	SynStrings2	121	0	52	Regular
	ChoirAahs	121	0	53	Regular
	ChoirAahs2	121	1	53	Regular
	VoiceOohs	121	0	54	Regular
	Humming	121	1	54	Regular
	SynthVoice	121	0	55	Regular
	AnalogVoice	121	1	55	Regular
	OrchestraHit	121	0	56	Regular
	BassHitPlus	121	1	56	Regular
	6thHit	121	2	56	Regular
	EuroHit	121	3	56	Regular
Brass	Trumpet	121	0	57	Regular
	DarkTpSoft	121	1	57	Regular
	Trombone	121	0	58	Regular
	Trombone2	121	1	58	Regular
	BriteTrombon	121	2	58	Regular
	Tuba	121	0	59	Regular
	MutedTrumpet	121	0	60	Regular
	MuteTrumpet2	121	1	60	Regular
	FrenchHorn	121	0	61	Regular
	FrenchHorn2	121	1	61	Regular
	BrassSection	121	0	62	Regular
	BrassSect2	121	1	62	Regular
	SynthBrass1	121	0	63	Regular
	SynthBrass3	121	1	63	Regular
	AnaSynBrass1	121	2	63	Regular
	JumpBrass	121	3	63	Regular
	SynthBrass2	121	0	64	Regular
	SynthBrass4	121	1	64	Regular
	AnaSynBrass2	121	2	64	Regular
Reed	SopranoSax	121	0	65	Regular
	AltoSax	121	0	66	Regular
	TenorSax	121	0	67	Regular
	BaritoneSax	121	0	68	Regular
	Oboe	121	0	69	Regular
	EnglishHorn	121	0	70	Regular
	Bassoon	121	0	71	Regular
	Clarinet	121	0	72	Regular
Pipe	Piccolo	121	0	73	Regular
	Flute	121	0	74	Regular
	Recorder	121	0	75	Regular
	PanFlute	121	0	76	Regular
	BlownBottle	121	0	77	Regular
	Shakuhachi	121	0	78	Regular
	Whistle	121	0	79	Regular
	Ocarina	121	0	80	Regular
Synth.Lead	SquareLead	121	0	81	Regular
	SquareLead2	121	1	81	Regular
	SineLead	121	2	81	Regular
	SawtoothLead	121	0	82	Regular
	SawtoothLd2	121	1	82	Regular
	SawPulseLead	121	2	82	Regular
	DoublSawLead	121	3	82	Regular
	Seq.Analog	121	4	82	Regular
	CalliopeLead	121	0	83	Regular
	ChiffLead	121	0	84	Regular
	CharangLead	121	0	85	Regular

GM2

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Synth.Lead	WireLead	121	1	85	Regular
	VoiceLead	121	0	86	Regular
	FifthsLead	121	0	87	Regular
	Bass&Lead	121	0	88	Regular
	SoftWhirl	121	1	88	Regular
Synth.Pad	NewAgePad	121	0	89	Regular
	WarmPad	121	0	90	Regular
	SinePad	121	1	90	Regular
	PolySynthPad	121	0	91	Regular
	ChoirPad	121	0	92	Regular
	ItopiaPad	121	1	92	Regular
	BowedPad	121	0	93	Regular
	MetallicPad	121	0	94	Regular
	HaloPad	121	0	95	Regular
	SweepPad	121	0	96	Regular
Synth.Effect	Rain	121	0	97	Regular
	SoundTrack	121	0	98	Regular
	Crystal	121	0	99	Regular
	SynthMallet	121	1	99	Regular
	Atmosphere	121	0	100	Regular
	Brightness	121	0	101	Regular
	Goblins	121	0	102	Regular
	Echoes	121	0	103	Regular
	EchoBell	121	1	103	Regular
	EchoPan	121	2	103	Regular
	Sci-Fi	121	0	104	Regular
Ethnic	Sitar	121	0	105	Regular
	Sitar2	121	1	105	Regular
	Banjo	121	0	106	Regular
	Shamisen	121	0	107	Regular
	Koto	121	0	108	Regular
	TaishoKoto	121	1	108	Regular
	Kalimba	121	0	109	Regular
	Bagpipe	121	0	110	Regular
	Fiddle	121	0	111	Regular
	Shanai	121	0	112	Regular
Percussive	TinkleBell	121	0	113	Regular
	Agogo	121	0	114	Regular
	SteelDrums	121	0	115	Regular
	Woodblock	121	0	116	Regular
	Castanets	121	1	116	Regular
	TaikoDrum	121	0	117	Regular
	ConcertBD	121	1	117	Regular
	MelodicTom	121	0	118	Regular
	MelodicTom2	121	1	118	Regular
	SynthDrum	121	0	119	Regular
	RhythmBoxTom	121	1	119	Regular
	ElectricDrum	121	2	119	Regular
	Rev.Cymbal	121	0	120	Regular
Sound Effect	GtrFretNoise	121	0	121	Regular
	GtrCutNoise	121	1	121	Regular
	StringSlap	121	2	121	Regular
	BreathNoise	121	0	122	Regular
	Fl.KeyClick	121	1	122	Regular
	Seashore	121	0	123	Regular
	Rain	121	1	123	Regular
	Thunder	121	2	123	Regular
	Wind	121	3	123	Regular
	Stream	121	4	123	Regular
	Bubble	121	5	123	Regular
	BirdTweet	121	0	124	Regular
	Dog	121	1	124	Regular
	HorseGallop	121	2	124	Regular
	BirdTweet2	121	3	124	Regular
	TelephonRing	121	0	125	Regular
	TelRing2	121	1	125	Regular
	DoorCreaking	121	2	125	Regular
	Door	121	3	125	Regular
	Scratch	121	4	125	Regular
	WindChime	121	5	125	Regular
	Helicopter	121	0	126	Regular
	CarEngine	121	1	126	Regular
	CarStop	121	2	126	Regular
	CarPass	121	3	126	Regular
	CarCrash	121	4	126	Regular
	Siren	121	5	126	Regular
	Train	121	6	126	Regular
	Jetplane	121	7	126	Regular
	Starship	121	8	126	Regular
	BurstNoise	121	9	126	Regular
	Applause	121	0	127	Regular
	Laughing	121	1	127	Regular
	Screaming	121	2	127	Regular

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Sound Effect	Punch	121	3	127	Regular
	HeartBeat	121	4	127	Regular
	Footsteps	121	5	127	Regular
	Gunshot	121	0	128	Regular
	MachineGun	121	1	128	Regular
	Lasergun	121	2	128	Regular
	Explosion	121	3	128	Regular
	StandardSet	120	0	1	Drums
	RoomSet	120	0	9	Drums
	PowerSet	120	0	17	Drums
	ElectroSet	120	0	25	Drums
	AnalogSet	120	0	26	Drums
	JazzSet	120	0	33	Drums
	BrushSet	120	0	41	Drums
	OrchestraSet	120	0	49	Drums
	SFXSet	120	0	57	Drums

(F11) Drum/key Assignment List / Liste der Tastenzuordnungen der Schlaginstrumente / Liste d'assignation instrument de batterie/touche du clavier / Lista de asignación de teclas/batería

Bank Select MSB (0-127)					127	127	127	127	127	127	127
Bank Select LSB (0-127)					0	0	0	0	0	0	0
Program Change (0-127)					0	1	8	16	24	25	27
Program Change (1-128)					1	2	9	17	25	26	28
MIDI		Keyboard Note	Key Off (*1)	Alternate Group (*2)	Standard Kit 1	Standard Kit 2	Room Kit	Rock Kit	Electro Kit	Analog Kit	Dance Kit
Note#	Note										
13	C#-1	C#0		3	SURDO MUTE						KICK DANCE 1
14	D-1	D0		3	SURDO OPEN						KICK DANCE 2
15	D#-1	D#0			HI Q						HI Q
16	E-1	E0			WHIP SLAP						WHIP SLAP
17	F-1	F0		4	SCRATCH H						SCRATCH DANCE 1
18	F#-1	F#0		4	SCRATCH L						SCRATCH DANCE 2
19	G-1	G0			FINGER SNAP						FINGER SNAP
20	G#-1	G#0			CLICK NOISE						CLICK NOISE
21	A-1	A0			MTRNM CLICK						DANCE PERC 1
22	A#-1	A#0			MTRNM BELL						REVERS DNC 1
23	B-1	B0			SEQ CLICK L						DANCE PERC 2
24	C0	C1			SEQ CLICK H						HI Q DANCE 1
25	C#0	C#1			BRUSH TAP						SNR ANALOG 3
26	D0	D1	●		BRUSH SWIRL						VINYL NOISE
27	D#0	D#1			BRUSH SLAP						SNR ANALOG 4
28	E0	E1	●		BRSH TP SWRL				REVERS CYMBL	REVERS CYMBL	REVERS CYMBL
29	F0	F1	●		SNARE ROLL						REVERS DNC 2
30	F#0	F#1			CASTANET				HI Q 2	HI Q 2	HI Q 2
31	G0	G1			SNARE SOFT	SNARE SOFT 2		SNARE NOISY	SN SNP ELCTR	SNR NOISY 4	SNARE TECHNO
32	G#0	G#1			STICKS						SNARE DANCE1
33	A0	A1			KICK SOFT				KICK 3	KICK 3	KCK TECHNO Q
34	A#0	A#1			OPEN RIM SHT	RIM H SHORT					RIM GATE
35	B0	B1			KICK TIGHT			KICK 2	KICK GATE	KICK AN SHRT	KCK TECHNO L
36	C1	C2			KICK	KICK SHORT		KICK GATE	KCK GATE HVY	KICK ANALOG	KICK TECHNO
37	C#1	C#2			SIDE STICK	STICK LIGHT				SIDE STCK AN	SIDE STCK AN
38	D1	D2			SNARE	SNARE SHORT	SNARE SNAPPY	SNARE ROCK	SNR NOISY 2	SNARE ANALOG	SNARE CLAP
39	D#1	D#2			HAND CLAP						DANCE CLAP
40	E1	E2			SNARE TIGHT	SNARE TITE H	SNR TITE SNP	SN ROCK TITE	SNR NOISY 3	SNR ANALOG2	SNARE DRY
41	F1	F2			FLOOR TOM L		TOM ROOM 1	TOM ROCK 1	TOM ELECTRO1	TOM ANALOG 1	TOM ANALOG 1
42	F#1	F#2		1	HI-HAT CLOSE					HH CLOSE AN	HI-HAT CLS 3
43	G1	G2			FLOOR TOM H		TOM ROOM 2	TOM ROCK 2	TOM ELECTRO2	TOM ANALOG 2	TOM ANALOG 2
44	G#1	G#2		1	HI-HAT PEDAL					HAT CLS AN2	HAT CLS AN 3
45	A1	A2			LOW TOM		TOM ROOM 3	TOM ROCK 3	TOM ELECTRO3	TOM ANALOG 3	TOM ANALOG 3
46	A#1	A#2		1	HI-HAT OPEN					HATOPEN AN	HI-HAT OPN 3
47	B1	B2			MID TOM L		TOM ROOM 4	TOM ROCK 4	TOM ELECTRO4	TOM ANALOG 4	TOM ANALOG 4
48	C2	C3			MID TOM H		TOM ROOM 5	TOM ROCK 5	TOM ELECTRO5	TOM ANALOG 5	TOM ANALOG 5
49	C#2	C#3			CRASH CYMBL1					CRASH ANALOG	CRASH ANALOG
50	D2	D3			HIGH TOM		TOM ROOM 6	TOM ROCK 6	TOM ELECTRO6	TOM ANALOG 6	TOM ANALOG 6
51	D#2	D#3			RIDE CYMBL 1						RIDE CYMBL 1
52	E2	E3			CHINESE CYM						CHINESE CYM
53	F2	F3			RIDE CYM CUP						RIDE CYM CUP
54	F#2	F#3			TAMBOURINE						TMBL ANALOG
55	G2	G3			SPLASH CYM						SPLASH CYM
56	G#2	G#3			COWBELL					COWBELL ANLG	COWBELL DNC
57	A2	A3			CRASH CYMBL2						CRASH CYMBL2
58	A#2	A#3			VIBRASLAP						VIBRASLAP AN
59	B2	B3			RIDE CYMBL 2						RIDE ANALOG
60	C3	C4			BONGO H						BONGO ANLG H
61	C#3	C#4			BONGO L						BONGO ANLG L
62	D3	D4			CONGA H MUTE					CONGA ANLG H	CONGA ANLG H
63	D#3	D#4			CONGA H OPEN					CONGA ANLG M	CONGA ANLG M
64	E3	E4			CONGA L					CONGA ANLG L	CONGA ANLG L
65	F3	F4			TIMBALE H						TIMBALE H
66	F#3	F#4			TIMBALE L						TIMBALE L
67	G3	G4			AGOGO H						AGOGO H
68	G#3	G#4			AGOGO L						AGOGO L
69	A3	A4			CABASA						CABASA
70	A#3	A#4			MARACAS					MARACAS 2	MARACAS 2
71	B3	B4	●		SAMBA WHSL H						SAMBA WHSL H
72	C4	C5	●		SAMBA WHSL L						SAMBA WHSL L
73	C#4	C#5			GUIRO SHORT						GUIRO SHORT
74	D4	D5	●		GUIRO LONG						GUIRO LONG
75	D#4	D#5			CLAVES					CLAVES 2	CLAVES 2
76	E4	E5			WOOD BLOCK H						DANCE PERC 3
77	F4	F5			WOOD BLOCK L						DANCE PERC 4
78	F#4	F#5			CUICA MUTE				SCRATCH H 2	SCRATCH H 2	DANCE BRTH 1
79	G4	G5			CUICA OPEN				SCRATCH L 2	SCRATCH L 2	DANCE BRTH 2
80	G#4	G#5		2	TRIANGLE MT						TRIANGLE MT
81	A4	A5		2	TRIANGLE OPN						TRIANGLE OPN
82	A#4	A#5			SHAKER						SHAKER
83	B4	B5			JINGLE BELLS						JINGLE BELLS
84	C5	C6			BELL TREE						BELL TREE
85	C#5	(C#6)									
86	D5	(D6)									
87	D#5	(D#6)									
88	E5	(E6)									
89	F5	(F6)									
90	F#5	(F#6)									
91	G5	(G6)									

Same as Standard Kit 1 (light grey) No Sound (dark grey)

*1 Key Off: Keys marked "●" stop sounding the instant they are released.
*2 Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.

(F11) Drum/key Assignment List / Liste der Tastenzuordnungen der Schlaginstrumente / Liste d'assignation instrument de batterie/touche du clavier / Lista de asignación de teclas/batería

Bank Select MSB (0-127)					127	127	127	127	126	126
Bank Select LSB (0-127)					0	0	0	0	0	0
Program Change (0-127)					32	40	48	86	0	1
Program Change (1-128)					33	41	49	87	1	2
MIDI Note#	MIDI Note	Keyboard Note	Key Off (*1)	Alternate Group (*2)	Jazz Kit	Brush Kit	Symphony Kit	Live! Studio Kit	SFX Kit 1	SFX Kit 2
13	C#-1	C#0		3						
14	D-1	D0		3						
15	D#-1	D#0								
16	E-1	E0								
17	F-1	F0		4						
18	F#-1	F#0		4						
19	G-1	G0								
20	G#-1	G#0								
21	A-1	A0								
22	A#-1	A#0								
23	B-1	B0								
24	C0	C1								
25	C#0	C#1								
26	D0	D1	●							
27	D#0	D#1								
28	E0	E1	●							
29	F0	F1	●							
30	F#0	F#1								
31	G0	G1			SNARE JAZZ H	BRUSH SLAP 2		SNARE STUDIO L STEREO		
32	G#0	G#1								
33	A0	A1					KICK SOFT 2	KICK AMB H		
34	A#0	A#1				RIM SHT LITE		OPEN RIM SHT		
35	B0	B1					GRAN CASSA	KICK AMB L		
36	C1	C2			KICK JAZZ	KICK JAZZ	GRAN CASSA M	KICK STUDIO STEREO	CUT NOISE	PHONE CALL
37	C#1	C#2			STICK LIGHT	STICK LIGHT	SIDE STICK	SIDE STCK	CUT NOISE2	DOOR SQUEAK
38	D1	D2			SNARE JAZZ L	BRUSH SLAP 3	BAND SNARE	SNARE STUDIO M STEREO		DOOR SLAM
39	D#1	D#2						HAND CLAP	STRING SLAP	SCRATCH CUT
40	E1	E2			SNARE JAZZ M	BRUSH TAP 2	BAND SNARE 2	SNARE STUDIO L STEREO		SCRATCH H 3
41	F1	F2				TOM BRUSH 1				WIND CHIME
42	F#1	F#2		1						TELEPHONE 2
43	G1	G2				TOM BRUSH 2				
44	G#1	G#2		1						
45	A1	A2				TOM BRUSH 3				
46	A#1	A#2		1						
47	B1	B2				TOM BRUSH 4				
48	C2	C3				TOM BRUSH 5				
49	C#2	C#3					HAND CYMBAL			
50	D2	D3				TOM BRUSH 6				
51	D#2	D#3					HND CYM SHRT			
52	E2	E3							FL.KEY CLICK	CAR ENGNE
53	F2	F3								CAR SQEAL
54	F#2	F#3								CAR PASSING
55	G2	G3								CAR CRASH
56	G#2	G#3								SIREN
57	A2	A3					HAND CYMBAL 2			TRAIN
58	A#2	A#3								JET PLANE
59	B2	B3					HND CY2 SHRT			STARSHIP
60	C3	C4								BURST
61	C#3	C#4								COASTER
62	D3	D4								SUBMARINE
63	D#3	D#4								
64	E3	E4								
65	F3	F4								
66	F#3	F#4								
67	G3	G4								
68	G#3	G#4							SHOWER	LAUGH
69	A3	A4							THUNDER	SCREAM
70	A#3	A#4							WIND	PUNCH
71	B3	B4	●						STREAM	HEARTBEAT
72	C4	C5	●						BUBBLE	FOOTSTEPS
73	C#4	C#5							FEED	
74	D4	D5	●							
75	D#4	D#5								
76	E4	E5								
77	F4	F5								
78	F#4	F#5								
79	G4	G5								
80	G#4	G#5		2						
81	A4	A5		2						
82	A#4	A#5								
83	B4	B5								
84	C5	C6							DOG	MACHINE GUN
85	C#5	(C#6)							HORSE	LASER GUN
86	D5	(D6)							BIRD TWEET 2	EXPLOSION
87	D#5	(D#6)								FIREWORK
88	E5	(E6)								
89	F5	(F6)								
90	F#5	(F#6)							GHOST	
91	G5	(G6)							MAOU	

Same as Standard Kit 1   No Sound

*1 Key Off: Keys marked "●" stop sounding the instant they are released.
*2 Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.

(F11) MIDI Data Format / MIDI-Datenformat / Format des données MIDI / Formato de datos MIDI

Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers.
Hexadecimal numbers may include the letter “H” as a suffix. Also, “n” can freely be defined as any whole number.
To enter data/values, refer to the table below.

Decimal	Hexadecimal	Binary
0	00	0000 0000
1	01	0000 0001
2	02	0000 0010
3	03	0000 0011
4	04	0000 0100
5	05	0000 0101
6	06	0000 0110
7	07	0000 0111
8	08	0000 1000
9	09	0000 1001
10	0A	0000 1010
11	0B	0000 1011
12	0C	0000 1100
13	0D	0000 1101
14	0E	0000 1110
15	0F	0000 1111
16	10	0001 0000
17	11	0001 0001
18	12	0001 0010
19	13	0001 0011
20	14	0001 0100
21	15	0001 0101
22	16	0001 0110
23	17	0001 0111
24	18	0001 1000
25	19	0001 1001
26	1A	0001 1010
27	1B	0001 1011
28	1C	0001 1100
29	1D	0001 1101
30	1E	0001 1110
31	1F	0001 1111

Decimal	Hexadecimal	Binary
32	20	0010 0000
33	21	0010 0001
34	22	0010 0010
35	23	0010 0011
36	24	0010 0100
37	25	0010 0101
38	26	0010 0110
39	27	0010 0111
40	28	0010 1000
41	29	0010 1001
42	2A	0010 1010
43	2B	0010 1011
44	2C	0010 1100
45	2D	0010 1101
46	2E	0010 1110
47	2F	0010 1111
48	30	0011 0000
49	31	0011 0001
50	32	0011 0010
51	33	0011 0011
52	34	0011 0100
53	35	0011 0101
54	36	0011 0110
55	37	0011 0111
56	38	0011 1000
57	39	0011 1001
58	3A	0011 1010
59	3B	0011 1011
60	3C	0011 1100
61	3D	0011 1101
62	3E	0011 1110
63	3F	0011 1111

Decimal	Hexadecimal	Binary
64	40	0100 0000
65	41	0100 0001
66	42	0100 0010
67	43	0100 0011
68	44	0100 0100
69	45	0100 0101
70	46	0100 0110
71	47	0100 0111
72	48	0100 1000
73	49	0100 1001
74	4A	0100 1010
75	4B	0100 1011
76	4C	0100 1100
77	4D	0100 1101
78	4E	0100 1110
79	4F	0100 1111
80	50	0101 0000
81	51	0101 0001
82	52	0101 0010
83	53	0101 0011
84	54	0101 0100
85	55	0101 0101
86	56	0101 0110
87	57	0101 0111
88	58	0101 1000
89	59	0101 1001
90	5A	0101 1010
91	5B	0101 1011
92	5C	0101 1100
93	5D	0101 1101
94	5E	0101 1110
95	5F	0101 1111

Decimal	Hexadecimal	Binary
96	60	0110 0000
97	61	0110 0001
98	62	0110 0010
99	63	0110 0011
100	64	0110 0100
101	65	0110 0101
102	66	0110 0110
103	67	0110 0111
104	68	0110 1000
105	69	0110 1001
106	6A	0110 1010
107	6B	0110 1011
108	6C	0110 1100
109	6D	0110 1101
110	6E	0110 1110
111	6F	0110 1111
112	70	0111 0000
113	71	0111 0001
114	72	0111 0010
115	73	0111 0011
116	74	0111 0100
117	75	0111 0101
118	76	0111 0110
119	77	0111 0111
120	78	0111 1000
121	79	0111 1001
122	7A	0111 1010
123	7B	0111 1011
124	7C	0111 1100
125	7D	0111 1101
126	7E	0111 1110
127	7F	0111 1111

- Except the table above, for example 144-159 (decimal)/9nH/1001 0000-1001 1111 (binary) denotes the Note On Message for each channel (1-16). 176-191/BnH/1011 0000-1011 1111 denotes the Control Change Message for each channel (1-16). 192-207/CnH/ 1100 0000-1100 1111 denotes the Program Change Message for each channel (1-16). 240/F0H/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.
- aaH (hexadecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- bbH/0bbbbbbb denotes the byte count.
- ccH/0ccccccc denotes the check sum.
- ddH/0ddddddd denotes the data/value.

Program Change

If you assign Program Change numbers using numbers 0 through 127, subtract one (1) from a Program change number (P.C. #) listed above. For example, if you wish to change to a Program with the P.C. #1, specify number 0. When program change reception is turned OFF, no program change data is transmitted or received. Also, Bank MSB/LSB is not transmitted or received.

Voice Name	MSB	LSB	P.C.# (1-128)
G. PIANO 1	0	122	1
VARIATION	0	123	1
G. PIANO 2	0	112	1
VARIATION	0	112	2
E.PIANO 1	0	122	6
VARIATION	0	122	89
E.PIANO 2	0	122	5
VARIATION	0	123	5
HARPSI.	0	122	7
VARIATION	0	123	7

Voice Name	MSB	LSB	P.C.# (1-128)
ORGAN 1	0	123	20
VARIATION	0	122	20
ORGAN 2	0	122	17
VARIATION	0	123	17
STRINGS	0	122	49
VARIATION	0	125	50
VIB./GTR.	0	122	12
VARIATION	0	122	25
BASS	0	122	33
VARIATION	0	122	34

P.C.#=Program Change number

MIDI CHANNEL MESSAGE (1)

MIDI Events	Status byte		1st Data byte			2nd Data byte			Voice	[MIDI] MIDI Reception		[MIDI] MIDI Transmission	[Internal Sequencer] PLAY	[Internal Sequencer] REC
	Status		Data	(HEX)	Parameter	Data	(HEX)	Parameter		Song	Voice1 (Right)/ Voice2/Left	Voice1 (Right)/ Voice2/Left	PLAY	Voice1(Right)/ Voice2/Left
Key Off [GM1] [GM2]	8nH	(n:Channel Number)	kk		Key no. (0-127)	vv		Velocity (0-127)	O	O	O	X	O	X
Key On [GM1] [GM2]	9nH	(n:Channel Number)	kk		Key no. (0-127)	vv		Key On :vv=1-127 Key Off :vv=0	O	O	O	●	O	O
Control Change	BnH		0	(00H)	Bank Select MSB [GM2]	0 8 8 64 118 119 120 121 126 127	(00H) (08H) (08H) (40H) (76H) (77H) (78H) (79H) (7EH) (7FH)	Normal Mega voice SA voice SFX voice GS Rhythm GS Normal GM2 Rhythm GM2 Normal SFX kit Drum kit	O	O	O	●	O	O
			1	(01H)	Modulation [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O	O	X	O	X
			5	(05H)	Portamento Time [GM2]	0-127	(00H...7FH)	Data	O	O	O	X	O	X
			6	(06H)	Data Entry MSB [GM2]	0-127	(00H...7FH)	Data	O	O	O	O	O	X
			7	(07H)	Main Volume [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O	O	●	O	O
			10	(0AH)	Panpot [GM1] [GM2]	0-127	(00H...7FH)	L64...C...R63	O	O	O	O	O	X
			11	(0BH)	Expression [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O	O	X	O	X
			32	(20H)	Bank Select LSB [GM2]	0-127	(00H...7FH)	Data	O	O	O	●	O	O
			38	(26H)	Data Entry LSB [GM2]	0-127	(00H...7FH)	Data	O	O	O	O	O	X
			64	(40H)	Sustain (Damper) [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O	O	●	O	O
			65	(41H)	Portamento [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O (Except Natural Piano)	O	O	X	O	X
			66	(42H)	Sostenuto [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O	O	O	● (Except Left)	O	O
			67	(43H)	Soft Pedal [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O	O	O	● (Except Left)	O	O
			71	(47H)	Harmonic Content [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O	O	O	X
			72	(48H)	Release Time [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O	X	O	X
			73	(49H)	Attack Time [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O	X	O	X
			74	(4AH)	Brightness [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O	O	O	X
			75	(4BH)	Decay Time [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O	X	O	X
			76	(4CH)	Vibrato Rate [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O	X	O	X
			77	(4DH)	Vibrato Depth [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O	X	O	X
			78	(4EH)	Vibrato Delay [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O	X	O	X
			84	(54H)	Portamento Control	0-127	(00H...7FH)	Key no. (0-127)	O	O	O	X	O	X
			91	(5BH)	Effect1 Depth (Reverb Send Level) [GM2]	0-127	(00H...7FH)	Data	O	O	O	●	O	O
			93	(5DH)	Effect3 Depth (Chorus Send Level) [GM2]	0-127	(00H...7FH)	Data	O	O	O	O	O	X
			94	(5EH)	Effect4 Depth (Variation Send Level)	0-127	(00H...7FH)	Data	O	O	O	X	O	X
			96	(60H)	RPN Increment	–	–	The data byte is ignored.	O	O	O	X	O	X
			97	(61H)	RPN Decrement	–	–	The data byte is ignored.	O	O	O	X	O	X
			98	(62H)	NRPN LSB	0-127	(00H...7FH)	Data	O	O	O	X	O	X
			99	(63H)	NRPN MSB	0-127	(00H...7FH)	Data	O	O	O	X	O	X
			100	(64H)	RPN LSB [GM2]	0-127	(00H...7FH)	Data	O	O	O	O	O	X
			101	(65H)	RPN MSB [GM2]	0-127	(00H...7FH)	Data	O	O	O	X	O	X
Mode Message	BnH	(n:Channel Number)	120	(78H)	All Sound Off [GM2]	0	(00H)	Data	O	O	O	X	O	X
			121	(79H)	Reset All Controllers [GM1] [GM2]	0	(00H)	Data	O	O	X	X	O	X
			122	(7AH)	Local Control	0 127	(00H) (7FH)	OFF ON	–	O	O	X	X	X
			123	(7BH)	All Note Off [GM1] [GM2]	0	(00H)	Data	O	O	O	X	O	X
			124	(7CH)	Omni Off [GM2]	0	(00H)	Data	O	O*1	X	X	O	X
			125	(7DH)	Omni On [GM2]	0	(00H)	Data	O	O*2	X	X	O	X
			126	(7EH)	Mono [GM2]	0-16	(00H...10H)	Data	O	O	X	X	O	X
			127	(7FH)	Poly [GM2]	0	(00H)	Data	O	O	X	X	O	X
Program Change [GM1] [GM2]	CnH	(n:Channel Number)	pp	(00H...7FH)	Voice Number (0-127)	–	–	–	O	O	O	●	O	O
Channel After Touch [GM1] [GM2]	DnH	(n:Channel Number)	vv	(00H...7FH)	Data	–	–	–	O	O	O	X	O	X
Polyphonic After Touch	AnH	(n:Channel Number)	kk	(00H...7FH)	Key no. (0-127)	vv	(00H...7FH)	Data	O	O	X	X	O	X
Pitch Bend Change [GM1] [GM2]	EnH	(n:Channel Number)	cc	(00H...7FH)	LSB	dd	(00H...7FH)	MSB	O	O	O	X	O	X
Realtime Message	F8H	MIDI Clock	–		–	–		–	–	X		O	–	–
	FAH	Start	–		–	–		–	–	X		O	–	–
	FBH	Continue	–		–	–		–	–	X		X	–	–
	FCH	Stop	–		–	–		–	–	X		O	–	–
	FEH	Active Sense [GM2]	–		–	–		–	–	O		O	–	–
	FFH	System Reset	–		–	–		–	–	X		X	–	–

●: Transmitted via panel operations and keyboard/controller performances.

*1: Same operation as when receiving All Note Off.
*2: Same operation as when receiving All Note Off. OMNI ON is not enabled.

[GM1] ... GM Required Parameter
[GM2] ... GM Level2 Required Parameter

MIDI CHANNEL MESSAGE (2)

NRPN

NRPN		Data Entry		Parameter	Data Range	Voice	[MIDI] MIDI Reception		[MIDI] MIDI Transmission	[Internal Sequencer] PLAY	[Internal Sequencer] REC
MSB	LSB	MSB	LSB				Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/Left
01H	08H	mmH	--	Vibrato Rate	mm : 00H-40H-7FH (-64...0...+63)	O	O	O	X	O	X
01H	09H	mmH	--	Vibrato Depth	mm : 00H-40H-7FH (-64...0...+63)	O	O	O	X	O	X
01H	0AH	mmH	--	Vibrato Delay	mm : 00H-40H-7FH (-64...0...+63)	O	O	O	X	O	X
01H	20H	mmH	--	Low Pass Filter Cutoff Frequency	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X
01H	21H	mmH	--	Low Pass Filter Resonance	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X
01H	30H	mmH	--	EQ Bass Gain	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X
01H	31H	mmH	--	EQ Treble Gain	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X
01H	34H	mmH	--	EQ Bass Frequency	mm : 04H-28H (32...2.0k[Hz])	O	O	X	X	O	X
01H	35H	mmH	--	EQ Treble Frequency	mm : 1CH-3AH (500...16.0k[Hz])	O	O	X	X	O	X
01H	63H	mmH	--	EG Attack Time	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X
01H	64H	mmH	--	EG Decay Time	mm : 00H-40H-7FH (-64...0...+63)	O	O	O	X	O	X
01H	66H	mmH	--	EG Release	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X
14H	rrH	mmH	--	Drum Low Pass Filter Cutoff Frequency	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum only)	O	X	X	O	X
15H	rrH	mmH	--	Drum Low Pass Filter Resonance	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum only)	O	X	X	O	X
16H	rrH	mmH	--	Drum EG Attack Rate	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum only)	O	X	X	O	X
17H	rrH	mmH	--	Drum EG Decay Rate	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum only)	O	X	X	O	X
18H	rrH	mmH	--	Drum Pitch Coarse	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum only)	O	X	X	O	X
19H	rrH	mmH	--	Drum Pitch Fine	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum only)	O	X	X	O	X
1AH	rrH	mmH	--	Drum Level	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum only)	O	X	X	O	X
1CH	rrH	mmH	--	Drum Pan	rr : drum instrument note number mm : 00H, 01H-40H-7FH (RND, L63...C...R63)	O (Drum only)	O	X	X	O	X
1DH	rrH	mmH	--	Drum Reverb Send Level	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum only)	O	X	X	O	X
1EH	rrH	mmH	--	Drum Chorus Send Level	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum only)	O	X	X	O	X
1FH	rrH	mmH	--	Drum Variation Send Level	rr : drum instrument note number mm : 00H-7FH (0...127) (Variation Connection = SYSTEM) mm : 00H, 01H-7FH (OFF, ON) (Variation Connection = INSERTION)	O (Drum only)	O	X	X	O	X
30H	rrH	mmH	--	Drum EQ Bass Gain	rr : drum instrument note number mm : 00H-7FH (0...127)	X	X	X	X	X	X
31H	rrH	mmH	--	Drum EQ Treble Gain	rr : drum instrument note number mm : 00H-7FH (0...127)	X	X	X	X	X	X
34H	rrH	mmH	--	Drum EQ Bass Frequency	rr : drum instrument note numbe mm : 04H-28H (32...2.0k[Hz])	X	X	X	X	X	X
35H	rrH	mmH	--	Drum EQ Treble Frequency	rr : drum instrument note number mm : 1CH-3AH (500...16.0k[Hz])	X	X	X	X	X	X

NRPN MSB: 14H-1FH (for drums) message is accepted as long as the channel is set with a drum voice.
Data Entry LSB: Ignored.

RPN

RPN		Data Entry		Parameter	Data Range	Voice	[MIDI] MIDI Reception		[MIDI] MIDI Transmission	[Internal Sequencer] PLAY	[Internal Sequencer] REC
MSB	LSB	MSB	LSB				Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/Left
00H	00H	mmH	--	Pitch Bend Sensitivity [GM1] [GM2]	mm : 00H-18H (0...+24[semitones])	O	O	O	X	O	X
00H	01H	mmH	llH	Fine Tune [GM1] [GM2]	mm ll : 00H 00H -100[cent] : mm ll : 40H 00H 0[cent] : mm ll : 7FH 7FH 100[cent]	O	O	O	X	O	X
00H	02H	mmH	--	Coarse Tune [GM1] [GM2]	mm : 28H-40H-58H (-24...0...+24[semitones])	O	O	O	X	O	X
00H	05H	mmH	llH	Modulation Sensitivity [GM2]	mm: Specified in semitone steps ll: Specified in 100/128 cent steps	O	O	X	X	O	X
7FH	7FH	--	--	Null [GM2]	--	O	O	O	X	O	X

[GM1] ... GM Required Parameter
[GM2] ... GM Level2 Required Parameter

XG PARAMETER CHANGE TABLE

MIDI Parameter Change table (XG SYSTEM)

[MIDI] [Internal Sequencer]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	MIDI Reception: Song	MIDI Reception: Voice1(Right)/ Voice2/Left	MIDI Transmission: Voice1(Right)/ Voice2/Left	PLAY: PLAY	REC: Voice1(Right)/Voice2/ Left
00	00	0 01 02 03	4	00-0F 00-0F 00-0F 00-0F	MASTER TUNE	-102.4...0...+102.3 [cent] 1st bit3-0→bit15-12 2nd bit3-0→bit11-8 3rd bit3-0→bit7-4 4th bit3-0→bit3-0	* Panel setting value	O	O	O	●	O	X
		04	1	00-7F	MASTER VOLUME	0...127	7F	O	O (Available for song parts)		X	O	X
		05	1	00-7F	MASTER ATTENUATOR	0...127	00	X	X	X	X	X	X
		06	1	28-58	TRANSPOSE	-24...0...+24 [semitones]	40	O	O (Available for song parts)		X	O	X
		7D	1	N	DRUM SETUP RESET	N:Drum setup number	–	O (Drum only)	O (Available for song parts)		X	O	X
		7E	1	00	XG SYSTEM ON	00=XG system ON	–	O	O (Available for song parts)		X	O	O
		7F	1	00	ALL PARAMETER RESET	00=ON	–	O	O (Available for song parts)		X	O	X

TOTAL SIZE 07

●: Transmitted via panel operations

MIDI Parameter Change table (SYSTEM INFORMATION)

[MIDI] [Internal Sequencer]

Address (H)			Size (H)	Data (H)	Parameter	Description	Voice	MIDI Reception: Song	MIDI Reception: Voice1(Right)/ Voice2/Left	MIDI Transmission: Voice1(Right)/ Voice2/Left	PLAY: PLAY	REC: Voice1(Right)/Voice2/ Left
01	00	00 : 0D 0E 0F	E 1 1	20-7F : 20-7F	Model Name 1 : Model Name 14 NOT USED NOT USED	32...127(ASCII CHARACTER) ... 32...127(ASCII CHARACTER)	–	–	–	O (Available only when receiving requests via MIDI)	–	–

TOTAL SIZE 10

Transmitted in response to Dump Request. Not received.

MIDI Parameter Change table (EFFECT1)

[MIDI] [Internal Sequencer]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	MIDI Reception: Song	MIDI Reception: Voice1(Right)/ Voice2/Left	MIDI Transmission: Voice1(Right)/ Voice2/Left	PLAY: PLAY	REC: Voice1(Right)/Voice2/ Left
02	01	00	2	00-7F 00-7F	REVERB TYPE MSB REVERB TYPE LSB		01(=HALL1) 00	O	O	O	O	O	O
		02	1	00-7F	REVERB PARAMETER 1		Depends on Reverb Type	O	O	O	X	O	X
		03	1	00-7F	REVERB PARAMETER 2		Depends on Reverb Type	O	O	O	X	O	X
		04	1	00-7F	REVERB PARAMETER 3		Depends on Reverb Type	O	O	O	X	O	X
		05	1	00-7F	REVERB PARAMETER 4		Depends on Reverb Type	O	O	O	X	O	X
		06	1	00-7F	REVERB PARAMETER 5		Depends on Reverb Type	O	O	O	X	O	X
		07	1	00-7F	REVERB PARAMETER 6		Depends on Reverb Type	O	O	O	X	O	X
		08	1	00-7F	REVERB PARAMETER 7		Depends on Reverb Type	O	O	O	X	O	X
		09	1	00-7F	REVERB PARAMETER 8		Depends on Reverb Type	O	O	O	X	O	X
		0A	1	00-7F	REVERB PARAMETER 9		Depends on Reverb Type	O	O	O	X	O	X
		0B	1	00-7F	REVERB PARAMETER 10		Depends on Reverb Type	O	O	O	X	O	X
		0C	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB (0...64...127)	40	O	O	O	X	O	X
		0D	1	01-7F	REVERB PAN	L63...C...R63	40	O	O	O	X	O	X

TOTAL SIZE 0E

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	MIDI Reception: Song	MIDI Reception: Voice1(Right)/ Voice2/Left	MIDI Transmission: Voice1(Right)/ Voice2/Left	PLAY: PLAY	REC: Voice1(Right)/Voice2/ Left
02	01	10	1	00-7F	REVERB PARAMETER 11		Depends on Reverb Type	O	O	O	X	O	X
		11	1	00-7F	REVERB PARAMETER 12		Depends on Reverb Type	O	O	O	X	O	X
		12	1	00-7F	REVERB PARAMETER 13		Depends on Reverb Type	O	O	O	X	O	X
		13	1	00-7F	REVERB PARAMETER 14		Depends on Reverb Type	O	O	O	X	O	X
		14	1	00-7F	REVERB PARAMETER 15		Depends on Reverb Type	O	O	O	X	O	X
		15	1	00-7F	REVERB PARAMETER 16		Depends on Reverb Type	O	O	O	X	O	X

TOTAL SIZE 06

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	MIDI Reception: Song	MIDI Reception: Voice1(Right)/ Voice2/Left	MIDI Transmission: Voice1(Right)/ Voice2/Left	PLAY: PLAY	REC: Voice1(Right)/Voice2/ Left
02	01	20	2	00-7F 00-7F	CHORUS TYPE MSB CHORUS TYPE LSB		41(=CHORUS1) 00	O	O	O	O	O	O
		22	1	00-7F	CHORUS PARAMETER 1		Depends on Chorus Type	O	O	O	X	O	X
		23	1	00-7F	CHORUS PARAMETER 2		Depends on Chorus Type	O	O	O	X	O	X
		24	1	00-7F	CHORUS PARAMETER 3		Depends on Chorus Type	O	O	O	X	O	X
		25	1	00-7F	CHORUS PARAMETER 4		Depends on Chorus Type	O	O	O	X	O	X
		26	1	00-7F	CHORUS PARAMETER 5		Depends on Chorus Type	O	O	O	X	O	X
		27	1	00-7F	CHORUS PARAMETER 6		Depends on Chorus Type	O	O	O	X	O	X
		28	1	00-7F	CHORUS PARAMETER 7		Depends on Chorus Type	O	O	O	X	O	X
		29	1	00-7F	CHORUS PARAMETER 8		Depends on Chorus Type	O	O	O	X	O	X
		2A	1	00-7F	CHORUS PARAMETER 9		Depends on Chorus Type	O	O	O	X	O	X
		2B	1	00-7F	CHORUS PARAMETER 10		Depends on Chorus Type	O	O	O	X	O	X
		2C	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB(0...64...127)	40	O	O	O	X	O	X
		2D	1	01-7F	CHORUS PAN	L63...C...R63	40	O	O	O	X	O	X
		2E	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB(0...64...127)	00	O	O	O	X	O	X

TOTAL SIZE 0F

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	MIDI Reception: Song	MIDI Reception: Voice1(Right)/ Voice2/Left	MIDI Transmission: Voice1(Right)/ Voice2/Left	PLAY: PLAY	REC: Voice1(Right)/Voice2/ Left
02	01	30	1	00-7F	CHORUS PARAMETER 11		Depends on Chorus Type	O	O	O	X	O	X
		31	1	00-7F	CHORUS PARAMETER 12		Depends on Chorus Type	O	O	O	X	O	X
		32	1	00-7F	CHORUS PARAMETER 13		Depends on Chorus Type	O	O	O	X	O	X
		33	1	00-7F	CHORUS PARAMETER 14		Depends on Chorus Type	O	O	O	X	O	X
		34	1	00-7F	CHORUS PARAMETER 15		Depends on Chorus Type	O	O	O	X	O	X
		35	1	00-7F	CHORUS PARAMETER 16		Depends on Chorus Type	O	O	O	X	O	X

TOTAL SIZE 06

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	[MIDI] MIDI Reception		MIDI Transmission	[Internal Sequencer] PLAY	REC
									Song	Voice1 (Right)/ Voice2/Left	Voice1 (Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/ Left
02	01	40	2	00-7F 00-7F	VARIATION TYPE MSB VARIATION TYPE LSB		05(=DELAY L,C,R) 00	O	O	O	X	O	O
		42	2	00-7F 00-7F	VARIATION PARAMETER 1 MSB VARIATION PARAMETER 1 LSB		Depends on Variation Type	O	O	O	X	O	X
		44		00-7F 00-7F	VARIATION PARAMETER 2 MSVARIATION PARAMETER 2 LSB		Depends on Variation Type	O	O	O	X	O	X
		46	2	00-7 00-7F	VARIATION PARAMETER 3 MSVARIATION PARAMETER 3 LSB		Depends on Variation Type	O	O	O	X	O	X
		48	2	00-7F 00-7F	VARIATION PARAMETER 4 MSB VARIATION PARAMETER 4 LSB		Depends on Variation Type	O	O	O	X	O	X
		4A	2	00-7F 00-7F	VARIATION PARAMETER 5 MSB VARIATION PARAMETER 5 LSB		Depends on Variation Type	O	O	O	X	O	X
		4C	2	00-7F 00-7F	VARIATION PARAMETER 6 MSB VARIATION PARAMETER 6 LSB		Depends on Variation Type	O	O	O	X	O	X
		4E	2	00-7F 00-7F	VARIATION PARAMETER 7 MSB VARIATION PARAMETER 7 LSB		Depends on Variation Type	O	O	O	X	O	X
		50	2	00-7F 00-7F	VARIATION PARAMETER 8 MSB VARIATION PARAMETER 8 LSB		Depends on Variation Type	O	O	O	X	O	X
		52	2	00-7F 00-7F	VARIATION PARAMETER 9 MSB VARIATION PARAMETER 9 LSB		Depends on Variation Type	O	O	O	X	O	X
		54	2	00-7F 00-7F	VARIATION PARAMETER 10 MSB VARIATION PARAMETER 10 LSB		Depends on Variation Type	O	O	O	X	O	X
		56	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB (0...64...127)	40	O	O	O	X	O	X
		57	1	01-7F	VARIATION PAN	L63...C...R63	40	O	O	O	X	O	X
		58	1	00-7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB (0...64...127)	00	O	O	O	X	O	X
		59	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB (0...64...127)	00	O	O	O	X	O	X
		5A	1	00-01	VARIATION CONNECTION	INSERTION, SYSTEM	00	O	O	O	X	O	X
		5B	1	00-7F	VARIATION PART NUMBER	Reception: Part1...16 (0...15) Transmission: Part1...16 (0...15) AD (64) OFF (127)	7F	O	O	O	X	O	X
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64...0...+63	40	O	O	O	X	O	X
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64...0...+63	40	O	O	O	X	O	X
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64...0...+63	40	O	O	O	X	O	X
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64...0...+63	40	O	O	O	X	O	X
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64...0...+63	40	O	O	O	X	O	X

TOTAL SIZE 21

02	01	70	1	00-7F	VARIATION PARAMETER 11		Depends on Variation Type	O	O	O	X	O	X
		71	1	00-7F	VARIATION PARAMETER 12		Depends on Variation Type	O	O	O	X	O	X
		72	1	00-7F	VARIATION PARAMETER 13		Depends on Variation Type	O	O	O	X	O	X
		73	1	00-7F	VARIATION PARAMETER 14		Depends on Variation Type	O	O	O	X	O	X
		74	1	00-7F	VARIATION PARAMETER 15		Depends on Variation Type	O	O	O	X	O	X
		75	1	00-7F	VARIATION PARAMETER 16		Depends on Variation Type	O	O	O	X	O	X

TOTAL SIZE 06

MIDI Parameter Change table (MULTI EQ)

Address (H)			Size (H)	Data (H)	Parameter	Description		Voice	[MIDI] MIDI Reception		MIDI Transmission	[Internal Sequencer] PLAY	REC
									Song	Voice1 (Right)/ Voice2/Left	Voice1 (Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/ Left
02	40	00	1	00-04	EQ TYPE	flat, jazz, pops, rock, classic	* The MULTI EQ Parameter cannot be reset to its factory setting with XG SYSTEM ON.	O	O	O	X	X	X
		01	1	34-4C	EQ GAIN1	-12...0...+12[dB]		O	O	O	X	X	X
		02	1	04-28	EQ FREQUENCY1	32...2.0k[Hz]		O	O	O	X	X	X
		03	1	01-78	EQ Q1	0.1...12.0		O	O	O	X	X	X
		04	1	00-01	EQ SHAPE1	shelving, peaking		O	O	O	X	X	X
		05	1	34-4C	EQ GAIN2	-12...0...+12[dB]		O	O	O	X	X	X
		06	1	0E-36	EQ FREQUENCY2	100...10.0k[Hz]		O	O	O	X	X	X
		07	1	01-78	EQ Q2	0.1...12.0		O	O	O	X	X	X
		08	1		NOT USED			–	–	–	–	–	–
		09	1	34-4C	EQ GAIN3	-12...0...+12[dB]		O	O	O	X	X	X
		0A	1	0E-36	EQ FREQUENCY3	100...10.0k[Hz]		O	O	O	X	X	X
		0B	1	01-78	EQ Q3	0.1...12.0		O	O	O	X	X	X
		0C	1		NOT USED			–	–	–	–	–	–
		0D	1	34-4C	EQ GAIN4	-12...0...+12[dB]		O	O	O	X	X	X
		0E	1	0E-36	EQ FREQUENCY4	100...10.0k[Hz]		O	O	O	X	X	X
		0F	1	01-78	EQ Q4	0.1...12.0		O	O	O	X	X	X
		10	1		NOT USED			–	–	–	–	–	–
		11	1	34-4C	EQ GAIN5	-12...0...+12[dB]		O	O	O	X	X	X
		12	1	1C-3A	EQ FREQUENCY5	0.5k...16.0k[Hz]		O	O	O	X	X	X
		13	1	01-78	EQ Q5	0.1...12.0		O	O	O	X	X	X
		14	1	00-01	EQ SHAPE5	shelving, peaking		O	O	O	X	X	X

TOTAL SIZE 15

MIDI Parameter Change table (EFFECT2)

Address (H)			Size (H)	Data (H)	Parameter	Description		Voice	[MIDI] MIDI Reception		[MIDI] MIDI Transmission	[Internal Sequencer] PLAY	[Internal Sequencer] REC
									Song	Voice1 (Right)/ Voice2/Left	Voice1 (Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/Left
03	n	00	2	00-7 00-7F	INSERTION EFFECT TYPE MSB INSERTION EFFECT TYPE LSB		* The EFFECT 2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.	O	O	O	O	O	O
		02	1	00-7F	INSERTION EFFECT PARAMETER 1			O	O	O	O	O	X
		03	1	00-7F	INSERTION EFFECT PARAMETER 2			O	O	O	O	O	O
		04	1	00-7F	INSERTION EFFECT PARAMETER 3			O	O	O	O	O	X
		05	1	00-7F	INSERTION EFFECT PARAMETER 4			O	O	O	X	O	X
		06	1	00-7F	INSERTION EFFECT PARAMETER 5			O	O	O	X	O	X
		07	1	00-7F	INSERTION EFFECT PARAMETER 6			O	O	O	X	O	X
		08	1	00-7F	INSERTION EFFECT PARAMETER 7			O	O	O	X	O	X
		09	1	00-7F	INSERTION EFFECT PARAMETER 8			O	O	O	X	O	X
		0A	1	00-7F	INSERTION EFFECT PARAMETER 9			O	O	O	X	O	X
		0B	1	00-7F	INSERTION EFFECT PARAMETER 10			O	O	O	O	O	O
		0C	1	00-7F	INSERTION EFFECT PART NUMBER	Reception: Part1...16 (0...15) Transmission: Part1...16 (0...15) AD (64) OFF (127)		O	O	O	O	O	X
		0D	1	00-7F	MW INSERTION CONTROL DEPTH	-64...0...+63		O	O	O	X	O	X
		0E	1	00-7F	BEND INSERTION CONTROL DEPTH	-64...0...+63		O	O	O	X	O	X
		0F	1	00-7F	CAT INSERTION CONTROL DEPTH	-64...0...+63		O	O	O	X	O	X
		10	1	00-7F	AC1 INSERTION CONTROL DEPTH	-64...0...+63		O	O	O	X	O	X
		11	1	00-7F	AC2 INSERTION CONTROL DEPTH	-64...0...+63		O	O	O	X	O	X

TOTAL SIZE 12

		20	1	00-7F	INSERTION EFFECT PARAMETER 11			O	O	O	X	O	X
		21	1	00-7F	INSERTION EFFECT PARAMETER 12			O	O	O	X	O	X
		22	1	00-7F	INSERTION EFFECT PARAMETER 13			O	O	O	X	O	X
		23	1	00-7F	INSERTION EFFECT PARAMETER 14			O	O	O	X	O	X
		24	1	00-7F	INSERTION EFFECT PARAMETER 15			O	O	O	X	O	X
		25	1	00-7F	INSERTION EFFECT PARAMETER 16			O	O	O	X	O	X

TOTAL SIZE 6

		30	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 1 MSB INSERTION EFFECT PARAMETER 1 LSB			O	O	O	X	O	X
		32	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 2 MSB INSERTION EFFECT PARAMETER 2 LSB			O	O	O	X	O	X
		34	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 3 MSB INSERTION EFFECT PARAMETER 3 LSB			O	O	O	X	O	X
		36	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 4 MSB INSERTION EFFECT PARAMETER 4 LSB			O	O	O	X	O	X
		38	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 5 MSB INSERTION EFFECT PARAMETER 5 LSB			O	O	O	X	O	X
		3A	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 6 MSB INSERTION EFFECT PARAMETER 6 LSB			O	O	O	X	O	X
		3C	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 7 MSB INSERTION EFFECT PARAMETER 7 LSB			O	O	O	X	O	X
		3E	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 8 MSB INSERTION EFFECT PARAMETER 8 LSB			O	O	O	X	O	X
		40	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 9 MSB INSERTION EFFECT PARAMETER 9 LSB			O	O	O	X	O	X
		42	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 10 MSB INSERTION EFFECT PARAMETER 10 LSB			O	O	O	X	O	X

TOTAL SIZE 14

The second byte of the address is considered as an Insertion effect number
n: insertion effect number
n=0-2

For effect types that do not require MSB, the Parameters for Address 02-0B will be received and the Parameters for Address 30-42 will not be received.
For effect types that require MSB, the Parameters for Address 30-42 will be received and the Parameters for Address 02-0B will not be received.
When bulk dumps that include Effect Type data are transmitted, the parameters for addresses 02-0B will always be transmitted.
For effects that require MSB however, when a bulk dump is received, the parameters for addresses 02-0B will not be received.

MIDI Parameter Change table (MULTI PART)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	[MIDI] MIDI Reception		MIDI Transmission	[Internal Sequencer] PLAY	REC
									Song	Voice1 (Right)/ Voice2/Left	Voice1 (Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/Left
08	nn	00	1	00-20	ELEMENT RESERVE	0...32	part10,26=0, other parts=2	–	–	–	–	–	–
		01	1	00-7F	BANK SELECT MSB	0...127	part10=7F, other parts=00	O	O	O	X	O	X
		02	1	00-7F	BANK SELECT LSB	0...127	00	O	O	O	X	O	X
		03	1	00-7F	PROGRAM NUMBER	1...128	00	O	O	O	X	O	X
		04	1	00-0F, 7F	Rcv CHANNEL	1...16, OFF	Part No.	O	O	X	X	O	X
		05	1	00-01	MONO/POLY MODE	MONO, POLY	01	O	O	X	X	O	X
		06	1	00-02	SAME NOTE NUMBER KEY ON ASSIGN	SINGLE, MULTI, INST(for Drum)	01	O	O	X	X	O	X
		07	1	00-03	PART MODE	NORMAL, DRUM, DRUMS1...2	part10=02, other parts=00	O	O	X	X	O	O
		08	1	28-58	NOTE SHIFT	-24...0...+24[semitones]	40	O	O	O	X	O	X
		09 0A	2	00-0F 00-0F	DETUNE	-12.8...0...+12.7[Hz] 1st bit3-0→bit7-4 2nd bit3-0→bit3-0	08 00	O	O	O	X	O	X
		0B	1	00-7F	VOLUME	0...127	64	O	O	O	X	O	X
		0C	1	00-7F	VELOCITY SENSE DEPTH	0...127	40	O	O	O	O	O	O
		0D	1	00-7F	VELOCITY SENSE OFFSET	0...127	40	O	O	O	O	O	O
		0E	1	00-7F	PAN	RND,L63...C...R63	40	O	O	O	X	O	X
		0F	1	00-7F	NOTE LIMIT LOW	C-2...G8	00	O	O	X	X	O	X
		10	1	00-7F	NOTE LIMIT HIGH	C-2...G8	7F	O	O	X	X	O	X
		11	1	00-7F	DRY LEVEL	0...127	7F	O	O	O	X	O	O
		12	1	00-7F	CHORUS SEND	0...127	00	O	O	O	X	O	X
		13	1	00-7F	REVERB SEND	0...127	28	O	O	O	X	O	X
		14	1	00-7F	VARIATION SEND	0...127	00	O	O	O	X	O	O
		15	1	00-7F	VIBRATO RATE	-64...0...+63	40	O	O	O	X	O	X
		16	1	00-7F	VIBRATO DEPTH	-64...0...+63	40	O	O	O	X	O	X
		17	1	00-7F	VIBRATO DELAY	-64...0...+63	40	O	O	O	X	O	X
		18	1	00-7F	FILTER CUTOFF FREQUENCY	-64...0...+63	40	O	O	O	X	O	X
		19	1	00-7F	FILTER RESONANCE	-64...0...+63	40	O	O	O	X	O	X
		1A	1	00-7F	EG ATTACK TIME	-64...0...+63	40	O	O	O	X	O	X
		1B	1	00-7F	EG DECAY TIME	-64...0...+63	40	O	O	O	X	O	X
		1C	1	00-7F	EG RELEASE TIME	-64...0...+63	40	O	O	O	X	O	X
		1D	1	28-58	MW PITCH CONTROL	-24...0...+24[semitones]	40	O	O	O	X	O	X
		1E	1	00-7F	MW LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	O	X	O	X
		1F	1	00-7F	MW AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	O	X	O	X
		20	1	00-7F	MW LFO PMOD DEPTH	0...127	0A	O	O	O	X	O	X
		21	1	00-7F	MW LFO FMOD DEPTH	0...127	00	O	O	O	X	O	X
		22	1	00-7F	MW LFO AMOD DEPTH	0...127	00	O	O	O	X	O	X
		23	1	28-58	BEND PITCH CONTROL	-24...0...+24[semitones]	42	O	O	O	X	O	X
		24	1	00-7F	BEND LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	O	X	O	X
		25	1	00-7F	BEND AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	O	X	O	X
		26	1	00-7F	BEND LFO PMOD DEPTH	0...127	00	O	O	O	X	O	X
		27	1	00-7F	BEND LFO FMOD DEPTH	0...127	00	O	O	O	X	O	X
		28	1	00-7F	BEND LFO AMOD DEPTH	0...127	00	O	O	O	X	O	X
TOTAL SIZE			29										
		30	1	00-01	Rcv PITCH BEND	OFF, ON	01	O	O	X	X	O	X
		31	1	00-01	Rcv CH AFTER TOUCH(CAT)	OFF, ON	01	O	O	X	X	O	X
		32	1	00-01	Rcv PROGRAM CHANGE	OFF, ON	01	O	O	X	X	O	X
		33	1	00-01	Rcv CONTROL CHANGE	OFF, ON	01	O	O	X	X	O	X
		34	1	00-01	Rcv POLY AFTER TOUCH(PAT)	OFF, ON	01	O	O	X	X	O	X
		35	1	00-01	Rcv NOTE MESSAGE	OFF, ON	01	O	O	X	X	O	X
		36	1	00-01	Rcv RPN	OFF, ON	01	O	O	X	X	O	X
		37	1	00-01	Rcv NRPN	OFF, ON	XGmode=01, GMmode=00	O	O	X	X	O	X
		38	1	00-01	Rcv MODULATION	OFF, ON	01	O	O	X	X	O	X
		39	1	00-01	Rcv VOLUME	OFF, ON	01	O	O	X	X	O	X
		3A	1	00-01	Rcv PAN	OFF, ON	01	O	O	X	X	O	X
		3B	1	00-01	Rcv EXPRESSION	OFF, ON	01	O	O	X	X	O	X
		3C	1	00-01	Rcv HOLD1	OFF, ON	01	O	O	X	X	O	X
		3D	1	00-01	Rcv PORTAMENTO	OFF, ON	01	O	O	X	X	O	X
		3E	1	00-01	Rcv SOSTENUTO	OFF, ON	01	O	O	X	X	O	X
		3F	1	00-01	Rcv SOFT PEDAL	OFF, ON	01	O	O	X	X	O	X
		40	1	00-01	Rcv BANK SELECT	OFF, ON	01	O	O	X	X	O	X
		41	1	00-7F	SCALE TUNING C	-64...0...+63[cent]	40	O	O	O	X	O	X
		42	1	00-7F	SCALE TUNING C#	-64...0...+63[cent]	40	O	O	O	X	O	X
		43	1	00-7F	SCALE TUNING D	-64...0...+63[cent]	40	O	O	O	X	O	X
		44	1	00-7F	SCALE TUNING D#	-64...0...+63[cent]	40	O	O	O	X	O	X
		45	1	00-7F	SCALE TUNING E	-64...0...+63[cent]	40	O	O	O	X	O	X
		46	1	00-7F	SCALE TUNING F	-64...0...+63[cent]	40	O	O	O	X	O	X
		47	1	00-7F	SCALE TUNING F#	-64...0...+63[cent]	40	O	O	O	X	O	X
		48	1	00-7F	SCALE TUNING G	-64...0...+63[cent]	40	O	O	O	X	O	X
		49	1	00-7F	SCALE TUNING G#	-64...0...+63[cent]	40	O	O	O	X	O	X
		4A	1	00-7F	SCALE TUNING A	-64...0...+63[cent]	40	O	O	O	X	O	X
		4B	1	00-7F	SCALE TUNING A#	-64...0...+63[cent]	40	O	O	O	X	O	X
		4C	1	00-7F	SCALE TUNING B	-64...0...+63[cent]	40	O	O	O	X	O	X
		4D	1	28-58	CAT PITCH CONTROL	-24...0...+24[semitones]	40	O	O	O	X	O	X
		4E	1	00-7F	CAT LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	O	X	O	X
		4F	1	00-7F	CAT AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	O	X	O	X
		50	1	00-7F	CAT LFO PMOD DEPTH	0...127	00	O	O	O	X	O	X
		51	1	00-7F	CAT LFO FMOD DEPTH	0...127	00	O	O	O	X	O	X
		52	1	00-7F	CAT LFO AMOD DEPTH	0...127	00	O	O	O	X	O	X
		53	1	28-58	PAT PITCH CONTROL	-24...0...+24[semitones]	40	O	O	X	X	O	X
		54	1	00-7F	PAT LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	X	X	O	X
		55	1	00-7F	PAT AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	X	X	O	X
		56	1	00-7F	PAT LFO PMOD DEPTH	0...127	00	O	O	X	X	O	X
		57	1	00-7F	PAT LFO FMOD DEPTH	0...127	00	O	O	X	X	O	X
		58	1	00-7F	PAT LFO AMOD DEPTH	0...127	00	O	O	X	X	O	X
		59	1	00-5F	AC1 CONTROLLER NUMBER	0...95	10	O	O	X	X	O	X
		5A	1	28-58	AC1 PITCH CONTROL	-24...0...+24[semitones]	40	O	O	X	X	O	X
		5B	1	00-7F	AC1 LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	X	X	O	X
		5C	1	00-7F	AC1 AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	X	X	O	X
		5D	1	00-7F	AC1 LFO PMOD DEPTH	0...127	00	O	O	X	X	O	X
		5E	1	00-7F	AC1 LFO FMOD DEPTH	0...127	00	O	O	X	X	O	X
		5F	1	00-7F	AC1 LFO AMOD DEPTH	0...127	00	O	O	X	X	O	X

(F11) MIDI Data Format / MIDI-Datenformat / Format des données MIDI / Formato de datos MIDI

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	[MIDI] MIDI Reception: Song	[MIDI] MIDI Reception: Voice1 (Right)/ Voice2/Left	[MIDI] MIDI Transmission: Voice1 (Right)/ Voice2/Left	[Internal Sequencer] PLAY: PLAY	[Internal Sequencer] REC: Voice1(Right)/Voice2/Left
		60	1	00-5F	AC2 CONTROLLER NUMBER	0...95	11	O	O	X	X	O	X
		61	1	28-58	AC2 PITCH CONTROL	-24...0...+24[semitones]	40	O	O	X	X	O	X
		62	1	00-7F	AC2 LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	X	X	O	X
		63	1	00-7F	AC2 AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	X	X	O	X
		64	1	00-7F	AC2 LFO PMOD DEPTH	0...127	00	O	O	X	X	O	X
		65	1	00-7F	AC2 LFO FMOD DEPTH	0...127	00	O	O	X	X	O	X
		66	1	00-7F	AC2 LFO AMOD DEPTH	0...127	00	O	O	X	X	O	X
		67	1	00-01	PORTAMENTO SWITCH	OFF, ON	00	O (Except Natural Piano)	O	O	X	O	X
		68	1	00-7F	PORTAMENTO TIME	0...127	00	O	O	O	X	O	X
		69	1	00-7F	PITCH EG INITIAL LEVEL	-64...0...+63	40	O	O	O	X	O	X
		6A	1	00-7F	PITCH EG ATTACK TIME	-64...0...+63	40	O	O	O	X	O	X
		6B	1	00-7F	PITCH EG RELEASE LEVEL	-64...0...+63	40	O	O	O	X	O	X
		6C	1	00-7F	PITCH EG RELEASE TIME	-64...0...+63	40	O	O	O	X	O	X
		6D	1	01-7F	VELOCITY LIMIT LOW	1...127	01	O	O	O	X	O	X
		6E	1	01-7F	VELOCITY LIMIT HIGH	1...127	7F	O	O	O	X	O	X
TOTAL SIZE			3F										
		70	1		NOT USED		–	–	–	–	–	–	–
		71	1		NOT USED		–	–	–	–	–	–	–
		72	1	00-7F	EQ BASS GAIN	-12dB...+12dB	40	O	O	O	O	O	O
		73	1	00-7F	EQ TREBLE GAIN	-12dB...+12dB	40	O	O	O	O	O	O
TOTAL SIZE			04										
		74	1		NOT USED		–	–	–	–	–	–	–
		75	1		NOT USED		–	–	–	–	–	–	–
		76	1	04-28	EQ BASS FREQUENCY	32...2.0k[Hz]	0C	O	O	O	O	O	O
		77	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k[Hz]	36	O	O	O	O	O	O
		78	1		NOT USED		–	–	–	–	–	–	–
		79	1		NOT USED		–	–	–	–	–	–	–
		7A	1		NOT USED		–	–	–	–	–	–	–
		7B	1		NOT USED		–	–	–	–	–	–	–
		7C	1		NOT USED		–	–	–	–	–	–	–
		7D	1		NOT USED		–	–	–	–	–	–	–
		7E	1		NOT USED		–	–	–	–	–	–	–
		7F	1		NOT USED		–	–	–	–	–	–	–
TOTAL SIZE			0C										
0A	nn	40	1	00-7F	MW OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	O	X	O	X
		41	1	00-7F	BEND OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	X	X	O	X
		42	1	00-7F	CAT OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	O	X	O	X
		43	1	00-7F	PAT OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	X	X	O	X
		44	1	00-7F	AC1 OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	X	X	O	X
		45	1	00-7F	AC2 OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	X	X	O	X
TOTAL SIZE			06										

nn = PART NUMBER
If there is a Drum Voice assigned to the part, the following parameters are ineffective.
· BANK SELECT LSB
· PORTAMENTO
· MONO/POLY
· SCALE TUNING
· POLY AFTER TOUCH
· PITCH EG

MIDI Parameter Change table (DRUM SETUP)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice	[MIDI] MIDI Reception		MIDI Transmission	[Internal Sequencer] PLAY	REC
									Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/Left
3n	rr	00	1	00-7F	PITCH COARSE	-64...0...+63	40	O (Drum only)	O (Available only for song parts)		X	O	X
		01	1	00-7F	PITCH FINE	-64...0...+63[cent]	40	O (Drum only)	O (Available only for song parts)		X	O	X
		02	1	00-7F	LEVEL	0...127	Depends on the note	O (Drum only)	O (Available only for song parts)		X	O	X
		03	1	00-7F	ALTERNATE GROUP	OFF, 1...127	Depends on the note	O (Drum only)	O (Available only for song parts)		X	O	X
		04	1	00-7F	PAN	RND, L63...C...R63	Depends on the note	O (Drum only)	O (Available only for song parts)		X	O	X
		05	1	00-7F	REVERB SEND	0...127	Depends on the note	O (Drum only)	O (Available only for song parts)		X	O	X
		06	1	00-7F	CHORUS SEND	0...127	Depends on the note	O (Drum only)	O (Available only for song parts)		X	O	X
		07	1	00-7F	VARIATION SEND	0...127	7F	O (Drum only)	O (Available only for song parts)		X	O	X
		08	1	00-01	KEY ASSIGN	SINGLE, MULTI	00	O (Drum only)	O (Available only for song parts)		X	O	X
		09	1	00-01	Rcv NOTE OFF	OFF, ON	Depends on the note	O (Drum only)	O (Available only for song parts)		X	O	X
		0A	1	00-01	Rcv NOTE ON	OFF, ON	01	O (Drum only)	O (Available only for song parts)		X	O	X
		0B	1	00-7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	40	O (Drum only)	O (Available only for song parts)		X	O	X
		0C	1	00-7F	LOW PASS FILTER RESONANCE	-64...0...+63	40	O (Drum only)	O (Available only for song parts)		X	O	X
		0D	1	00-7F	EG ATTACK RATE	-64...0...+63	40	O (Drum only)	O (Available only for song parts)		X	O	X
		0E	1	00-7F	EG DECAY1 RATE	-64...0...+63	40	O (Drum only)	O (Available only for song parts)		X	O	X
		0F	1	00-7F	EG DECAY2 RATE	-64...0...+63	40	O (Drum only)	O (Available only for song parts)		X	O	X

TOTAL SIZE 10

		20	1	00-7F	EQ BASS GAIN	-12...+12[dB]	40	X	X	X	X	X	X
		21	1	00-7F	EQ TREBLE GAIN	-12...+12[dB]	40	X	X	X	X	X	X
		22	1		NOT USED		–	–	–	–	–	–	–
		23	1		NOT USED		–	–	–	–	–	–	–
		24	1	04-28	EQ BASS FREQUENCY	32...2.0k[Hz]	0C	X	X	X	X	X	X
		25	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k[Hz]	36	X	X	X	X	X	X
		26	1		NOT USED		–	–	–	–	–	–	–
		27	1		NOT USED		–	–	–	–	–	–	–
		28	1		NOT USED		–	–	–	–	–	–	–
		29	1		NOT USED		–	–	–	–	–	–	–
		2A	1		NOT USED		–	–	–	–	–	–	–
		2B	1		NOT USED		–	–	–	–	–	–	–
		2C	1		NOT USED		–	–	–	–	–	–	–
		2D	1		NOT USED		–	–	–	–	–	–	–

TOTAL SIZE 0E

n: Drum Setup Number (0-1)
rr: note number (0D-5B)
In the following cases, the instrument will initialize all Drum Setups.
· XG SYSTEM ON received
· GM SYSTEM ON received
· GM LEVEL2 SYSTEM ON received
· GS RESET received
· DRUM SETUP RESET received (only when in XG mode)

[Note]
When a part to which a Drum Setup is assigned receives a program change, the assigned Drum Setup will be initialized.
If the same Drum Setup is assigned to two or more parts, changes in Drum Setup parameters (including program changes) will apply to all parts to which it is assigned.

System Exclusive Messages (1)

[GM1] ... GM Required Parameter
[GM2] ... GM Level2 Required Parameter

System Exclusive Messages (Universal Real Time Messages)

[MIDI] / [Internal Sequencer]

MIDI Event	Data Format	Voice	MIDI Reception		MIDI Transmission	PLAY	REC
			Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/ Left
Master Volume [GM2]	F0 7F XN 04 01 SS TT F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN =When N is received N=0-F,whichever is received. X=ignored 00000100 04 = Sub-ID #1=Device Control Message 00000001 01 = Sub-ID #2=Master Volume 0sssssss SS = Volume LSB 0ttttttt TT = Volume MSB 11110111 F7 = End of Exclusive	O	O (Available for song parts)		X	O	X
Master Fine Tuning [GM2]	F0 7F XN 04 03 SS TT F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00000100 04 = Sub-ID #1=Device Control Message 00000011 03 = Sub-ID #2=Master Fine Tuning 0sssssss SS = Fine Tuning LSB 0ttttttt TT = Fine Tuning MSB 11110111 F7 = End of Exclusive	O	O (Available for song parts)		X	O	X
Master Coarse Tuning [GM2]	F0 7F XN 04 04 00 TT F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00000100 04 = Sub-ID #1=Device Control Message 00000100 04 = Sub-ID #2=Master Coarse Tuning 00000000 00 0ttttttt TT = Coarse Tuning MSB 11110111 F7 = End of Exclusive	O	O (Available for song parts)		X	O	X
Reverb Parameter [GM2]	F0 7F XN 04 05 01 01 01 01 01 PP VV ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00000100 04 = Sub-ID #1=Device Control Message 00000101 05 = Sub-ID #2=Global Parameter Control 00000001 01 = Slot path length = 1 00000001 01 = Parameter ID width = 1 00000001 01 = Value width = 1 00000001 01 = Slot path MSB = 1 00000001 01 = Slot path LSB = 1 (Reverb) 0ppppppp PP = Parameter to be controlled. 0vvvvvvv VV = Value for the Parameter. : : 11110111 F7 = End of Exclusive Parameter(pp) Value(vv) Display -- pp=0 Reverb Type 0...8 0:RoomS 1:RoomM 2:RoomL 3:HallM 4:HallL(default) 8:GM Plate pp=1 Reverb Time 0...127 0...11.0s	O	O		X	O	X
Chorus Parameter [GM2]	F0 7F XN 04 05 01 01 01 01 02 PP VV ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00000100 04 = Sub-ID #1=Device Control Message 00000101 05 = Sub-ID #2=Global Parameter Control 00000001 01 = Slot path length = 1 00000001 01 = Parameter ID width = 1 00000001 01 = Value width = 1 00000001 01 = Slot path MSB = 1 00000010 02 = Slot path LSB = 2 (Chorus) 0ppppppp PP = Parameter to be controlled. 0vvvvvvv VV = Value for the Parameter. : : 11110111 F7 = End of Exclusive Parameter(pp) Value(vv) Display -- pp=0 Chorus Type 0...5 0:GM Chorus1 1:GM Chorus2 2:GM Chorus3 (default) 3:GM Chorus4 4:FB Chorus 5:GM Flanger pp=1 Mod Rate 0...127 0...15.5Hz pp=2 Mod Depth 0...127 pp=3 Feedback 0...127 pp=4 Send to Reverb 0...127	O	O		X	O	X
Channel Pressure (Aftertouch) [GM2]	F0 7F XN 09 01 0M PP RR ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=Controller Destination Setting 00000001 01 = Sub-ID #2=Controller Type:01(Channel Pressure) 0000mmmm 0M = MIDI Channel (00-0F) 0ppppppp PP = Controlled Paramete 0rrrrrrr RR = Data : : 11110111 F7 = End of Exclusive Make sure to set both the controlled parameter and the range. Parameters not set will be restored to their default values. Control Parameter(pp) Data(RR) Description Default Value -- pp=00 Pitch Control 28H-58H -24...0...+24semitones 40H pp=01 Filter Cutoff Control 00H-7FH -9600...0...+9450cents 40H pp=02 Amplitude Control 00H-7FH -100...0...+100% 40H pp=03 LFO Pitch Depth 00H-7FH 0...127 00H pp=04 LFO Filter Depth 00H-7FH 0...127 00H pp=05 LFO Amplitude Depth 00H-7FH 0...127 00H	O	O	X	X	O	X

MIDI Event	Data Format	Voice	[MIDI] MIDI Reception		MIDI Transmission	[Internal Sequencer] PLAY	REC
			Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/ Left
Controller (Control Change) [GM2]	F0 7F XN 09 03 0M CC PP RR ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=Controller Destination Setting 00000011 03 = Sub-ID #2=Controller Type:03(Control Change) 0000mmmm 0M = MIDI Channel (00-0F) 0ccccccc CC = Controller Number (01H-1FH, 40H-5FH) 0ppppppp PP = Controlled Parameter 0rrrrrrr RR = Range : : 11110111 F7 = End of Exclusive Make sure to set both the controlled parameter and the range. Parameters not set will be restored to their default values. Control Parameter(pp) / Data(RR) / Description / Default Value pp=00 Pitch Control / 28H-58H / -24...0...+24semitones / 40H pp=01 Filter Cutoff Control / 00H-7FH / -9600...0...+9450cents / 40H pp=02 Amplitude Control / 00H-7FH / -100...0...+100% / 40H pp=03 LFO Pitch Depth / 00H-7FH / 0...127 / 00H pp=04 LFO Filter Depth / 00H-7FH / 0...127 / 00H pp=05 LFO Amplitude Depth / 00H-7FH / 0...127 / 00H	O	O	X	X	O	X
Key-Based Instrument Control [GM2]	F0 7F XN 0A 01 0M KK CC VV ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001010 0A = Sub-ID #1=Key-Based Instrument Control 00000001 01 = Sub-ID #2=Controller 0000mmmm 0M = MIDI Channel (00-0F) 0kkkkkkk KK = Key Number 0ccccccc CC = Controller Number 0vvvvvvv VV = Value : : 11110111 F7 = End of Exclusive Make sure to set both the controlled number and the value. Control Number(CC) / Value(VV) / Description / Default Value CC=07H Volume / 00H-7FH / -100...0...+100% / 40H CC=0AH Pan / 00H-7FH (absolute) / L63...C...R63 / (Preset value) CC=5BH Reverb Send Level / 00H-7FH / 0...Max / (Preset value) CC=5DH Chorus Send Level / 00H-7FH (absolute) / 0...Max / (Preset value)	O (Drum only)	O	X	X	O	X

System Exclusive Messages (Universal Non-Real Time Messages)

MIDI Event	Data Format	Voice	[MIDI] MIDI Reception		MIDI Transmission	[Internal Sequencer] PLAY	REC
			Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/ Voice2/Left	PLAY	Voice1(Right)/Voice2/ Left
GM1 System On [GM1] [GM2]	F0 7E XN 09 01 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=General MIDI Message 00000001 01 = Sub-ID #2=General MIDI On 11110111 F7 = End of Exclusive	O	O (Available for song parts)		O	O	O
GM2 System On [GM2]	F0 7E XN 09 03 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=General MIDI Message 00000011 03 = Sub-ID #2=General MIDI2 On 11110111 F7 = End of Exclusive	O	O (Available for song parts)		X	O	X
General MIDI System Off [GM1] [GM2]	F0 7E XN 09 02 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=General MIDI Message 00000010 02 = Sub-ID #2=General MIDI Off 11110111 F7 = End of Exclusive	O	O (Available for song parts)		X	O	X
Scale/Octave Tuning [GM2]	F0 7E XN 08 08 JJ GG MM SS ... F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001000 08 = Sub-ID #1=MIDI Tuning Standard 00001000 08 = Sub-ID #2=scale/octave tuning 1byte form 0jjjjjjj JJ = Channel/option byte1 bits 0 to 1 = channel 15 to 16 bits 2 to 6 = reserved 0ggggggg GG = Channel byte2 - bits0 to 6 = channel 8 to 14 0mmmmmmm MM = Channel byte2 - bits0 to 6 = channel 1 to 7 0sssssss SS = 12byte tuning offset of 12 semitones from C to B 00H means -64cent 40H means 0cent 7FH means +63cent : : 11110111 F7 = End of Exclusive	O	O (Available for song parts)		X	O	X

System Exclusive Messages (2)

System Exclusive Messages (XG)

[MIDI]

MIDI Event	Data Format	Voice	MIDI Reception		MIDI Transmission
			Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/Voice2/Left
XG Parameter Changes	F0 43 1n 4C hh mm ll dd ... F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0001nnnn 1n = Device Number n=always 0(when transmit), n=0-F(when recieve) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 01111111 ll = Address Low 0ddddddd dd = Data : : 11110111 F7 = End of Exclusive	* Refer to XG Parameter Change Table.	* Refer to XG Parameter Change Table.		* Refer to XG Parameter Change Table.
XG Bulk Dump	F0 43 0n 4C aa bb hh mm ll dd ... dd cc F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0000nnnn 0n = Device Number n=always 0(when transmit), n=0-F(when recieve) 01001100 4C = Model ID 0aaaaaaa aa = Byte Count MSB 0bbbbbbb bb = Byte Count LSB 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 01111111 ll = Address Low 0ddddddd dd = Data : : 0ddddddd dd = Data 0ccccccc cc = Checksum 11110111 F7 = End of Exclusive	* Refer to XG Parameter Change Table.	* Refer to XG Parameter Change Table.		* Refer to XG Parameter Change Table.
XG Parameter Request	F0 43 3n 4C hh mm ll F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0011nnnn 3n = Device Number n=always 0(when transmit), n=0-F(when recieve) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 01111111 ll = Address Low 11110111 F7 = End of Exclusive	–	* Refer to XG Parameter Change Table.		* Refer to XG Parameter Change Table.
XG Dump Request	F0 43 2n 4C hh mm ll F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0010nnnn 2n = Device Number n=always 0(when transmit), n=0-F(when recieve) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 01111111 ll = Address Low 11110111 F7 = End of Exclusive	–	* Refer to XG Parameter Change Table.		* Refer to XG Parameter Change Table.

System Exclusive Messages (Clavinova compliance)

11110000	F0 =	Exclusive status
01000011	43 =	YAMAHA ID
01110011	73 =	Clavinova ID
:		:
11110111	F7 =	End of Exclusive

[MIDI]

MIDI Event	Data Format	Voice	MIDI Reception		MIDI Transmission
			Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/Voice2/Left
Internal Clock	F0 43 73 01 02 F7 00000001 01 = Model ID (Clavinova common ID) 00000010 02 = Internal Clock Substatus	–	X	X	X
External Clock	F0 43 73 01 03 F7 00000001 01 = Model ID (Clavinova common ID) 00000011 03 = External Clock Substatus	–	X	X	X

System Exclusive Messages (Natural Voice)

[MIDI]

MIDI Event	Data Format	Voice	MIDI Reception		MIDI Transmission
			Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/Voice2/Left
String Resonance Depth	F0 43 73 01 50 11 0n 02 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00-0F) 00000010 02 = SubID(String Resonance Depth) 0ddddddd dd = Depth(00-48) 11110111 F7 = End of Exclusive	X	X	X	X
Sustain Sample Depth	F0 43 73 01 50 11 0n 03 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00-0F) 00000011 03 = SubID(Sustain Sample Depth) 0ddddddd dd = Depth(00-48) 11110111 F7 = End of Exclusive	O Available for song Natural Voices.	O	O	X
Key Off Sampling Depth	F0 43 73 01 50 11 0n 04 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00-0F) 00000100 04 = SubID(Key Off Sampling Depth) 0ddddddd dd = Depth(00-50) 11110111 F7 = End of Exclusive	O Available for song Natural Voices.	O	O	X
Soft Pedal Depth	F0 43 73 01 50 11 0n 05 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00-0F) 00000101 05 = SubID(Soft Pedal Depth) 0ddddddd dd = Depth(00-7F) 11110111 F7 = End of Exclusive	O Available for song Natural Voices.	O	O	X

System Exclusive Messages (Others)

MIDI Event	Data Format	Voice
MIDI Master Tuning	F0 43 1n 27 30 00 00 0m 0l cc F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0001nnnn 1n n= always 0(when transmit), n=0-F(when receive) 00100111 27 = Model ID of TG100 00110000 30 = Address High 00000000 00 = Address Mid 00000000 00 = Address Low 0000mmmm 0m = Master Tune MSB 00001111 0l = Master Tune LSB 0ccccccc cc = don't care 11110111 F7 = End of Exclusive	O

[MIDI]

MIDI Reception		MIDI Transmission
Song	Voice1(Right)/ Voice2/Left	Voice1(Right)/Voice2/Left
O	O	X

(F11) MIDI Implementation Chart / MIDI-Implementierungstabelle / Tableau d'implémentation MIDI / Gráfico de implementacíon MIDI

YAMAHA [MODUS] Date :26-MAR-2007
Model F11 MIDI Implementation Chart Version : 1.1

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 - 3 1 - 16	1 - 16 1 - 16	
Mode	Default Messages Altered	3 × **************	3 × ×	
Note Number : True voice		0 - 127 **************	0 - 127 0 - 127	
Velocity	Note ON Note OFF	○ 9nH,v=1-127 × 9nH,v=0	○ 9nH,v=1-127 ×	
After Touch	Key's Ch's	× ×	○ ○	
Pitch Bend		×	○ 0 - 24 semi	
Control Change	0,32 7,10 6,38 64,66,67 71,74 91,93 1,5,11,65 72,73,84,94 96,97 98,99 100,101	○ ○ × ○ ○ ○ × × × × ×	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	Bank Select Volume/Pan Data Entry Pedal Sound Controller Reverb/Chorus Depth RPN Inc,Dec NRPN LSB,MSB RPN LSB,MSB
Prog Change : True #		○ 0 - 127 **************	○ 0 - 127	
System Exclusive		○	○	
Common	: Song Pos. : Song Sel. : Tune	× × ×	× × ×	
System Real Time	: Clock : Commands	○ ○	× ×	
Aux Mes-sages	: All Sound Off : Reset All Cntrls : Local ON/OFF : All Notes OFF : Active Sense : Reset	× × × × ○ ×	○ (120,126,127) ○ (121) ○ (122) ○ (123-125) ○ ×	
Notes:				

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON ,MONO ○ : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF,MONO × : No

(F01) MIDI Data Format / MIDI-Datenformat / Format des données MIDI / Formato de datos MIDI

Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers.
Hexadecimal numbers may include the letter “H” as a suffix. Also, “n” can freely be defined as any whole number.
To enter data/values, refer to the table below.

Decimal	Hexadecimal	Binary	Decimal	Hexadecimal	Binary	Decimal	Hexadecimal	Binary	Decimal	Hexadecimal	Binary
0	00	0000 0000	32	20	0010 0000	64	40	0100 0000	96	60	0110 0000
1	01	0000 0001	33	21	0010 0001	65	41	0100 0001	97	61	0110 0001
2	02	0000 0010	34	22	0010 0010	66	42	0100 0010	98	62	0110 0010
3	03	0000 0011	35	23	0010 0011	67	43	0100 0011	99	63	0110 0011
4	04	0000 0100	36	24	0010 0100	68	44	0100 0100	100	64	0110 0100
5	05	0000 0101	37	25	0010 0101	69	45	0100 0101	101	65	0110 0101
6	06	0000 0110	38	26	0010 0110	70	46	0100 0110	102	66	0110 0110
7	07	0000 0111	39	27	0010 0111	71	47	0100 0111	103	67	0110 0111
8	08	0000 1000	40	28	0010 1000	72	48	0100 1000	104	68	0110 1000
9	09	0000 1001	41	29	0010 1001	73	49	0100 1001	105	69	0110 1001
10	0A	0000 1010	42	2A	0010 1010	74	4A	0100 1010	106	6A	0110 1010
11	0B	0000 1011	43	2B	0010 1011	75	4B	0100 1011	107	6B	0110 1011
12	0C	0000 1100	44	2C	0010 1100	76	4C	0100 1100	108	6C	0110 1100
13	0D	0000 1101	45	2D	0010 1101	77	4D	0100 1101	109	6D	0110 1101
14	0E	0000 1110	46	2E	0010 1110	78	4E	0100 1110	110	6E	0110 1110
15	0F	0000 1111	47	2F	0010 1111	79	4F	0100 1111	111	6F	0110 1111
16	10	0001 0000	48	30	0011 0000	80	50	0101 0000	112	70	0111 0000
17	11	0001 0001	49	31	0011 0001	81	51	0101 0001	113	71	0111 0001
18	12	0001 0010	50	32	0011 0010	82	52	0101 0010	114	72	0111 0010
19	13	0001 0011	51	33	0011 0011	83	53	0101 0011	115	73	0111 0011
20	14	0001 0100	52	34	0011 0100	84	54	0101 0100	116	74	0111 0100
21	15	0001 0101	53	35	0011 0101	85	55	0101 0101	117	75	0111 0101
22	16	0001 0110	54	36	0011 0110	86	56	0101 0110	118	76	0111 0110
23	17	0001 0111	55	37	0011 0111	87	57	0101 0111	119	77	0111 0111
24	18	0001 1000	56	38	0011 1000	88	58	0101 1000	120	78	0111 1000
25	19	0001 1001	57	39	0011 1001	89	59	0101 1001	121	79	0111 1001
26	1A	0001 1010	58	3A	0011 1010	90	5A	0101 1010	122	7A	0111 1010
27	1B	0001 1011	59	3B	0011 1011	91	5B	0101 1011	123	7B	0111 1011
28	1C	0001 1100	60	3C	0011 1100	92	5C	0101 1100	124	7C	0111 1100
29	1D	0001 1101	61	3D	0011 1101	93	5D	0101 1101	125	7D	0111 1101
30	1E	0001 1110	62	3E	0011 1110	94	5E	0101 1110	126	7E	0111 1110
31	1F	0001 1111	63	3F	0011 1111	95	5F	0101 1111	127	7F	0111 1111

- Except the table above, for example 144-159 (decimal)/9nH/1001 0000-1001 1111 (binary) denotes the Note On Message for each channel (1-16). 176-191/BnH/1011 0000-1011 1111 denotes the Control Change Message for each channel (1-16). 192-207/CnH/ 1100 0000-1100 1111 denotes the Program Change Message for each channel (1-16). 240/F0H/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.
- aaH (hexadecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- bbH/0bbbbbbb denotes the byte count.
- ccH/0ccccccc denotes the check sum.
- ddH/0ddddddd denotes the data/value.

Program Change

If you assign Program Change numbers using numbers 0 through 127, subtract one (1) from a Program change number (P.C. #) listed above. For example, if you wish to change to a Program with the P.C. #1, specify number 0. When program change reception is turned OFF, no program change data is transmitted or received. Also, Bank MSB/LSB is not transmitted or received.

Voice Name	MSB	LSB	P.C.# (1-128)
G. PIANO 1	0	122	1
VARIATION	0	123	1
G. PIANO 2	0	112	1
VARIATION	0	112	2
E.PIANO 1	0	122	6
VARIATION	0	122	89
E.PIANO 2	0	122	5
VARIATION	0	123	5
HARPSI.	0	122	7
VARIATION	0	123	7

Voice Name	MSB	LSB	P.C.# (1-128)
ORGAN 1	0	123	20
VARIATION	0	122	20
ORGAN 2	0	122	17
VARIATION	0	123	17
STRINGS	0	122	49
VARIATION	0	125	50
VIB./GTR.	0	122	12
VARIATION	0	122	25
BASS	0	122	33
VARIATION	0	122	34

P.C.#=Program Change number

1. NOTE ON/OFF

Data format: [9nH] → [kk] → [vv]

9nH = Note ON/OFF event (n = channel number)
kk = Note number (Transmit: 09H - 78H = A-2 - C8 / Receive: 00H - 7FH = C-2 - G8)*
vv = Velocity (Key ON = 01H - 7FH, Key OFF = 00H)

Data format: [8nH] → [kk] → [vv] (reception only)

8nH = Note OFF event (n = channel number)
kk = Note number: 00H - 7FH = C-2 - G8
vv = Velocity

* If received value exceeds the supported range for the selected voice, the note is adjusted by the necessary number of octaves.

2. CONTROL CHANGE

Data format: [BnH] → [cc] → [vv]

BnH = Control change (n = channel number)
cc = Control number
vv = Data Range

(1) Bank Select

ccH	Parameter	Data Range (vvH)
00H	Bank Select MSB	00H: Normal
20H	Bank Select LSB	00H...7FH

Bank selection processing does not occur until receipt of next Program Change message.

(2) Modulation (reception only)

ccH	Parameter	Data Range (vvH)
01H	Modulation	00H...7FH

(3) Main Volume (reception only)

ccH	Parameter	Data Range (vvH)
07H	Volume MSB	00H...7FH

(4) Panpot (reception only)

ccH	Parameter	Data Range (vvH)
0AH	Panpot	00H-...7FH

(5) Expression

ccH	Parameter	Data Range (vvH)
0BH	Expression MSB	00H...7FH

(6) Damper

ccH	Parameter	Data Range (vvH)
40H	Damper MSB	00H...7FH

(7) Sostenuto

ccH	Parameter	Data Range (vvH)
42H	Sostenuto	00H-3FH:off, 40H-7FH:on

(8) Soft Pedal

ccH	Parameter	Data Range (vvH)
43H	Soft Pedal	00H-3FH:off, 40H-7FH:on

(9) Effect1 Depth (Reverb Send Level)

ccH	Parameter	Data Range (vvH)
5BH	Effect1 Depth	00H...7FH

Adjusts the reverb send level.

(10) Effect4 Depth (Variation Effect Send Level)

ccH	Parameter	Data Range (vvH)
5EH	Effect4 Depth	00H...7FH

(11) RPN

ccH	Parameter	Data Range (vvH)
65H	RPN MSB	Coarse Tune 02H, Fine Tune 01H, Pitch Bend Range 00H
64H	RPN LSB	
06H	Data Entry MSB	
38H	Data Entry LSB	

3. MODE MESSAGES

Data format: [BnH] → [cc] → [vv]

BnH = Control event (n = channel number)
cc = Control number
vv = Data Range

(1) All Sound Off

ccH	Parameter	Data Range (vvH)
78H	All Sound Off	00H

Switches off all sound from the channel. Does not reset Note On and Hold On conditions established by Channel Messages.

(2) Reset All Controllers

ccH	Parameter	Data Range (vvH)
79H	Reset All Controllers	00H

Resets controllers as follows.

Controller	Value
Expression	127 (max)
Damper Pedal	0 (off)
Sostenuto	0 (off)
Soft Pedal	0 (off)

(3) Local Control (reception only)

ccH	Parameter	Data Range (vvH)
7AH	Local Control	00H (off), 7FH (on)

(4) All Notes Off

ccH	Parameter	Data Range (vvH)
7BH	All Notes Off	00H

Switches OFF all the notes that are currently ON on the specified channel. Any notes being held by the damper or sostenuto pedal will continue to sound until the pedal is released.

(5) Omni Off (reception only)

ccH	Parameter	Data Range (vvH)
7CH	Omni Off	00H

Same processing as for All Notes Off.

(6) Omni On (reception only)

ccH	Parameter	Data Range (vvH)
7DH	Omni On	00H

Same processing as for All Notes Off.

(7) Mono (reception only)

ccH	Parameter	Data Range (vvH)
7EH	Mono	00H

Same processing as for All Sound Off.

(8) Poly (reception only)

ccH	Parameter	Data Range (vvH)
7FH	Poly	00H

Same processing as for All Sound Off.

- When control change reception is turned OFF in the Function mode, control change data will not be transmitted or received.
- Local on/off, OMNI on/off are not transmitted. (The appropriate note off number is supplied with “All Note Off” transmission).
- When a voice bank MSB/LSB is received, the number is stored in the internal buffer regardless of the received order, then the stored value is used to select the appropriate voice when a program change message is received.
- The Multi-timbre and Poly modes are always active. No change occurs when OMNI ON, OMNI OFF, MONO, or POLY mode messages are received.

4. PROGRAM CHANGE

Data format: [CnH] → [ppH]

CnH = Program event (n = channel number)
ppH = Program change number

- When program change reception is turned OFF in the Function mode, no program change data is transmitted or received. Also, Bank MSB/LSB is not transmitted or received.

For a list of Program Change, see page 23.

5. SYSTEM REALTIME MESSAGES

[rrH]
F8H: Timing clock
FAH: Start
FCH: Stop
FEH: Active sensing

Data	Transmission	Reception
F8H	Transmitted every 96 clocks	Received as 96-clock tempo timing when MIDI clock is set to External
FAH	Recorder start	Recorder start Not received when the MIDI clock is set to Internal.
FCH	Recorder stop	Recorder stop Not received when the MIDI clock is set to Internal.
FEH	Transmitted every 200 milliseconds	If a signal is not received via MIDI for more than 400 milliseconds, the same processing will take place for All Sound Off, All Notes Off and Reset All Controllers as when those signals are received.

- Caution: If an error occurs during MIDI reception, the Damper, Sostenuto, and Soft effects for all channels are turned off and an All Note Off occurs.

6. SYSTEM EXCLUSIVE MESSAGES (Yamaha MIDI Format)

Panel Data Transmit

Data format: [F0H] → [43H] → [0nH] → [7CH] → ... → [F7H]
F0H, 43H, 0nH, 7CH (n: channel number)
00H, LLH (data length)
43H, 4CH, 20H, 20H (CL)
43H, 4CH, 50H, 27H, 30H, 35H
3xH, 3yH
aaH, bbH: Device No. aa=LSB, bb=MSB
aa=72H, bb=17H
[PANEL DATA]
[CHECK SUM (1byte)] = 0-(43H+4CH+20H+......+Data end)
F7H

• Panel Data Contents

(1) 1'st Voice
(2) Dual On/Off
(3) Dual Voice
(4) Dual Balance
(5) Dual Detune
(6) Dual Voice1 Octave
(7) Dual Voice2 Octave
(8) Dual Voice1 Effect Depth
(9) Dual Voice2 Effect Depth
(10) Split On/Off
(11) Split Voice
(12) Split Point
(13) Split Balance
(14) Split Voice1 Octave
(15) Split Voice2 Octave
(16) Split Voice1 Effect Depth
(17) Split Voice2 Effect Depth
(18) Split Dumper Mode
(19) Reverb Type 1
(20) Reverb Type 2
(21) Reverb Depth 1
(22) Reverb Depth 2
(23) Effect Type 1
(24) Effect Type 2
(25) Effect Depth
(26) Variation On/Off
(27) Touch Sensitivity
(28) Fixed Data
(29) Soft Pedal Depth
(30) Absolute tempo low byte
(31) Absolute tempo high byte
(32) Key-Off Sampling Depth
(33) DDE On/Off
(34) DDE Depth
(35) Brilliance

- Panel data send requests cannot be received.

7. SYSTEM EXCLUSIVE MESSAGES (Universal System Exclusive)

(1) Universal Realtime Message

Data format: [F0H] → [7FH] → [XnH] → [04H] → [01H] → [llH] → [mmH] → [F7H]

MIDI Master Volume

- Simultaneously changes the volume of all channels.
- When a MIDI master volume message is received, the volume only has affect on the MIDI receive channel, not the panel master volume.

F0H = Exclusive status
7FH = Universal Realtime
7FH = ID of target device
04H = Sub-ID #1=Device Control Message
01H = Sub-ID #2=Master Volume
llH = Volume LSB
mmH = Volume MSB
F7H = End of Exclusive
or
F0H = Exclusive status
7FH = Universal Realtime
XnH = When n is received n=0-F, whichever is received.
X = don't care
04H = Sub-ID #1=Device Control Message
01H = Sub-ID #2=Master Volume
llH = Volume LSB
mmH = Volume MSB
F7H = End of Exclusive

(2) Universal Non-Realtime Message (GM On)

General MIDI Mode On

Data format: [F0H] → [7EH] → [XnH] → [09H] → [01H] → [F7H]
F0H = Exclusive status
7EH = Universal Non-Realtime
7FH = ID of target device
09H = Sub-ID #1=General MIDI Message
01H = Sub-ID #2=General MIDI On
F7H = End of Exclusive
or
F0H = Exclusive status
7EH = Universal Non-Realtime
XnH = When received, n=0-F.
X = don't care
09H = Sub-ID #1=General MIDI Message
01H = Sub-ID #2=General MIDI On
F7H = End of Exclusive

When the General MIDI mode ON message is received, the MIDI system will be reset to its default settings.
This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

8. SYSTEM EXCLUSIVE MESSAGES (XG Standard)

(1) XG Native Parameter Change

Data format: [F0H] → [43H] → [1nH] → [4CH] → [hhH] → [mmH] → [llH] → [ddH] → [F7H]
F0H = Exclusive status
43H = YAMAHA ID
1nH = When received, n=0-F.
When transmitted, n=0.
4CH = Model ID of XG
hhH = Address High
mmH = Address Mid
llH = Address Low
ddH = Data
|
F7H = End of Exclusive

Data size must match parameter size (2 or 4 bytes).
When the XG System On message is received, the MIDI system will be reset to its default settings.
The message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

(2) XG Native Bulk Data (reception only)

Data format: [F0H] → [43H] → [0nH] → [4CH] → [aaH] → [bbH] → [hhH] → [mmH] → [llH] → [ddH] →...→ [ccH] → [F7H]
F0H = Exclusive status
43H = YAMAHA ID
0nH = When received, n=0-F.
When transmitted, n=0.
4CH = Model ID of XG
aaH = ByteCount
bbH = ByteCount
hhH = Address High
mmH = Address Mid
llH = Address Low
ddH = Data
| |
| |
ccH = Check sum
F7H = End of Exclusive

- Receipt of the XG SYSTEM ON message causes reinitialization of relevant parameters and Control Change values. Allow sufficient time for processing to execute (about 50 msec) before sending the CLP-240/230 another message.
- XG Native Parameter Change message may contain two or four bytes of parameter data (depending on the parameter size).
- For information about the Address and Byte Count values, refer to Table 1 below. Note that the table's Total Size value gives the size of a bulk block. Only the top address of the block (00H, 00H, 00H) is valid as a bulk data address.

9. SYSTEM EXCLUSIVE MESSAGES (Clavinova MIDI Format)

Data format: [F0H] → [43H] → [73H] → [01H] → [nnH] → [F7H]

F0H = Exclusive status
43H = Yamaha ID
73H = Clavinova ID
01H = Product ID
nnH = Substatus

nn	Control
02H	Internal MIDI clock
03H	External MIDI clock

F7H = End of Exclusive

10. SYSTEM EXCLUSIVE MESSAGES (Special Control)

Data format: [F0H] → [43H] → [73H] → [66H] → [11H] → [0nH] → [ccH] → [vvH] → [F7H]

F0H = Exclusive status
43H = Yamaha ID
73H = Clavinova ID
7FH = Extended Product ID
xxH = Product ID
11H = Special control
0nH = Control MIDI change (n=channel number)
cc = Control number
vv = Value
F7H = End of Exclusive

Control	0n	ccH	vvH
Split Point	Always 00H	14H	14H: Split Key Number
Metronome	Always 00H	1BH	00H: No accent 01H-0FH: 1/4-15/4 7FH: off
Damper Level	ch: 00H-0FH	3DH	(Sets the Damper Level for each channel) 00H-7FH
Channel Detune	ch: 00H-0FH	43H	(Sets the Detune value for each channel) 00H-7FH
Voice Reserve	ch: 00H-0FH	45H	00H : Reserve off 7FH : on*

* When Volume, Expression is received for Reserve On, they will be effective from the next Key On. Reserve Off is normal.

11. SYSTEM EXCLUSIVE MESSAGES (Others)

Data format: [F0H] → [43H] → [1nH] → [27H] → [30H] → [00H] → [00H] → [mmH] → [//H] → [ccH] → [F7H]

Master Tuning (XG and last message priority) simultaneously changes the pitch of all channels.

F0H = Exclusive Status
43H = Yamaha ID
1nH = When received, n=0-F.
When transmitted, n=0.
27H = Model ID of TG100
30H = Sub ID
00H =
00H =
mmH = Master Tune MSB
//H = Master Tune LSB
ccH = don't care (under 7FH)
F7H = End of Exclusive

<Table 1>

MIDI Parameter Change table (SYSTEM)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
00 00 00	4	020C - 05F4*	MASTER TUNE	-50 - +50[cent]	00 04 00 00
01				1st bit 3 - 0 → bit 15 - 12	400
02				2nd bit 3 - 0 → bit 11 - 8	
03				3rd bit 3 - 0 → bit 7 - 4	
				4th bit 3 - 0 → bit 3 - 0	
04	1	00 - 7F	MASTER VOLUME	0 - 127	7F
05	1	—	—		
7E		00	XG SYSTEM ON	00=XG system ON	
7F		00	RESET ALL PARAMETERS	00=ON (receive only)	
TOTAL SIZE 07					

*Values lower than 020CH select -50 cents. Values higher than 05F4H select +50 cents.

<Table 2>

MIDI Parameter Change table (EFFECT 1)

Refer to the "Effect MIDI Map" for a complete list of Reverb, Chorus and Variation type numbers.

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 01 00	2	00-7F	REVERB TYPE MSB	Refer to Effect MIDI Map	01 (=HALL1)
		00-7F	REVERB TYPE LSB	00 : basic type	00
02 01 40	2	00-7F	VARIATION TYPE MSB	Refer to Effect MIDI Map	00(=Effect off)
		00-7F	VARIATION TYPE LSB	00 : basic type	00

• "VARIATION" refers to the EFFECT on the panel.

<Table 3>

MIDI Parameter Change table (MULTI PART)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
08 nn 11	1	00 - 7F	DRY LEVEL	0 - 127	7F

nn = Part Number

• Effect MIDI Map

REVERB

	MSB	LSB
ROOM	02H	10H
HALL 1	01H	10H
HALL 2	01H	11H
STAGE	03H	10H
OFF	00H	00H

EFFECT

	MSB	LSB
CHORUS	42H	10H
PHASER	48H	10H
TREMOLO	46H	10H
ROTARY SP	47H	10H
OFF	00H	00H

YAMAHA [MODUS] Date :31-MAY-2007
Model F01 MIDI Implementation Chart Version : 1.0

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 1 - 16	1 - 16 1 - 16	
Mode	Default Messages Altered	3 × **************	3 × ×	
Note Number : True voice		0 - 127 **************	0 - 127 0 - 127	
Velocity	Note ON Note OFF	O 9nH,v=1-127 ×	O 9nH,v=1-127 ×	
After Touch	Key's Ch's	× ×	× ×	
Pitch Bend		×	O 0 - 24 semi	
Control Change	0,32	O	O	Bank Select
	1	×	O	Modulation
	7	O	O	Main Volume
	10	×	O	Panpot
	11	×	O	Expression
	6,38	×	O	Data Entry
	64,66,67	O	O	
	84	×	O	Portament Control
	91,94	O	O	Effect Depth
	96-97	×	O	RPN Inc,Dec
	100-101	×	O	RPN LSB,MSB
Prog Change : True #		O 0 - 127 **************	O 0 - 127	
System Exclusive		O	O	
Common	: Song Pos. : Song Sel. : Tune	× × ×	× × ×	
System Real Time	: Clock : Commands	O O	O O	
Aux Mes- sages	: All Sound Off : Reset All Cntrls : Local ON/OFF : All Notes OFF : Active Sense : Reset	O O × O O ×	O (120,126,127) O (121) O (122) O (123-125) O ×	
Notes:				

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON ,MONO O : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF,MONO × : No

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